

Additional Options

HP 8.3kVA 40A Single Phase NA/JP Core Intelligent Modular Power Distribution Unit	AF521A
HP 8.6kVA 24A Three Phase NA/JP Core Intelligent Modular Power Distribution Unit	AF522A
HP 14.4kVA 40A Three Phase NA/JP Intelligent Modular Power Distribution Unit	AF533A
HP 17.3kVA 48A Three Phase NA/JP Core Intelligent Modular Power Distribution Unit	AF523A
HP 7.3kVA 32A Single Phase INTL Core Intelligent Modular Power Distribution Unit	AF525A
HP 11kVA 16A Three Phase INTL Core Intelligent Modular Power Distribution Unit	AF526A
HP 22kVA 32A Three Phase INTL Core Intelligent Modular Power Distribution Unit	AF527A
HP 17.3kVA 48A 208V Three Phase 12 Outlet Core NA/JP Intelligent Power Distribution Unit	AF535A
HP 17.3kVA 24A 415V Three Phase 12 Outlet Core NA/JP Intelligent Power Distribution Unit	AF537A
HP 22kVA 32A 400V Three Phase 12 Outlet Core INTL Intelligent Power Distribution Unit	AF538A
<b>iPDU Kits with Standard Extension Bars</b>	
HP 4.9kVA 24A Single Phase NA/JP Intelligent Modular Power Distribution Kit	AF531A
HP 8.6kVA 24A Three Phase NA/JP Intelligent Modular Power Distribution Kit	AF532A
HP 7.3kVA 32A Single Phase INTL Intelligent Modular Power Distribution Kit	AF534A
<b>iPDU Extension Bars</b>	
HP 5xC13 Intelligent PDU Extension Bar G2 Kit	AF547A
HP 5xC13 Outlets Power and UID LEDs Pair Standard Extension Bar	AF528A
<b>NOTE:</b> Please see the QuickSpecs for Technical Specifications and additional information: <a href="http://h18000.www1.hp.com/products/quickspecs/13650_div/13650_div.html">http://h18000.www1.hp.com/products/quickspecs/13650_div/13650_div.html</a> (Worldwide)	

Managed Power Distribution Units (maPDU)

<b>Half Height Models</b>	
HP 3.6kVA 200-240 Volt Detachable C20 Input (7xC13/1xC19) WW Managed PDU	H8B49A
<b>Full Height Models</b>	
HP 2.8kVA 120 Volt L5-30 Input (24x NEMA 5-20) NA/JP Managed PDU	H8B48A
HP 4.9kVA 208 Volt L6-30 Input (20xC13/4xC19) NA/JP Managed PDU	H8B50A
HP 7.3kVA 200-240 Volt IEC309 32A Input (20xC13/4xC19) INTL Managed PDU	H8B51A
HP 8.6kVA 208 Volt L15-30 3 Phase Input (18xC13/6xC19) NA/JP Managed PDU	H8B52A
HP 8.6kVA 208 Volt L21-30 3 Phase Input (20xC13/3xC19/1x NEMA 5-20) NA/JP Managed PDU	H8B53A
HP 11kVA 400 Volt IEC309 16A 3 Phase Input (21xC13/3xC19) INTL Managed PDU	H8B54A
HP 14.4kVA 208V CS8365C 3 Phase Input (12xC13/12xC19) NA/JP Managed PDU	H8B55A
HP 17.3kVA 208V IEC309 60A 3 Phase Input (12xC13/12xC19) NA/JP Managed PDU	H8B56A

ВЯРНО С  
ОРИГИНАЛА

Additional Options

**NOTE:** Please see the QuickSpecs for Technical Specifications and additional information:  
<http://www.hp.com/h20195/v2/GetHtml.aspx?docname=c04376673>  
 (Worldwide)

HP Rack Series

**HP Intelligent Series Rack**

HP 642 1075mm Pallet Intelligent Rack BW903A  
 HP 642 1075mm Shock Intelligent Rack BW904A

**NOTE:** Please see the QuickSpecs for Technical Specifications such as height, width, depth, weight, and color:  
[http://h18000.www1.hp.com/products/quickspecs/14223\\_dir/14223\\_dir.htm](http://h18000.www1.hp.com/products/quickspecs/14223_dir/14223_dir.htm)  
 (Worldwide)  
**NOTE:** For additional information regarding Rack Cabinets, please see the following URL: <http://www.hp.com/go/rackandpower>.

HP Rack Options

**HP LCD8500 1U Rackmount Console Kit Models**

HP LCD8500 1U US Rackmount Console Kit AF630A  
 HP LCD8500 1U UK Rackmount Console Kit AF631A  
 HP LCD8500 1U DE Rackmount Console Kit AF632A  
 HP LCD8500 1U FR Rackmount Console Kit AF633A  
 HP LCD8500 1U JP Rackmount Console Kit AF642A  
 HP LCD8500 1U RU Rackmount Console Kit AF643A  
 HP LCD8500 1U INTL Rackmount Console Kit AF644A  
 HP LCD8500 1U US TAA Rackmount Console Kit AF645A

**HP LCD8500 1U Rackmount Console Kit Options**

HP Kit LCD 1.83m Latch Display Port Cable G7T29A  
 HP Location Discovery Services LCD8500 Kit TL052A  
 HP Rack LED Light Kit BW939A

**HP USB Keyboard and Mouse**

HP USB BFR with PVC Free US Keyboard/Mouse Kit 631341-B21  
 HP USB BFR with PVC Free UK Keyboard/Mouse Kit 631344-B21  
 HP USB BFR with PVC Free FR Keyboard/Mouse Kit 631346-B21  
 HP USB BFR with PVC Free ES Keyboard/Mouse Kit 631348-B21  
 HP USB BFR with PVC Free DE Keyboard/Mouse Kit 631358-B21  
 HP USB BFR with PVC Free JP Keyboard/Mouse Kit 631360-B21  
 HP USB BFR with PVC Free IT Keyboard/Mouse Kit 631362-B21  
 HP USB BFR with PVC Free CN Keyboard/Mouse Kit 631364-B21  
 HP USB BFR with PVC Free AE Keyboard/Mouse Kit 638212-B21  
 HP USB BFR with PVC Free RU Keyboard/Mouse Kit 638214-B21  
 HP USB BFR with PVC Free IN Keyboard/Mouse Kit 672097-D63  
 HP USB BFR with PVC Free AP-Intl Keyboard/Mouse Kit 672097-373  
 HP USB BFR with PVC Free Intl Keyboard/Mouse Kit 672097-B33  
 HP USB BFR with PVC Free PT Keyboard/Mouse Kit 672097-133  
 HP USB BFR with PVC Free TR Keyboard/Mouse Kit 672097-143  
 HP USB BFR with PVC Free CZ Keyboard/Mouse Kit 672097-223  
 HP USB BFR with PVC Free FI Keyboard/Mouse Kit 672097-353  
 HP USB BFR with PVC Free SE Keyboard/Mouse Kit 672097-103

БЯРНО С  
 ОРГАНИЗАЦИЯ

000102

### Additional Options

HP USB BFR with PVC Free CH Keyboard/Mouse Kit 672097-113  
HP USB BFR with PVC Free KR Keyboard/Mouse Kit 672097-KD3

**NOTE:** Please see the QuickSpecs for Technical Specifications and additional information:

[http://h18000.www1.hp.com/products/quickspecs/13792\\_div/13792\\_div.htm](http://h18000.www1.hp.com/products/quickspecs/13792_div/13792_div.htm)  
(Worldwide)

#### HP TFT7600 G2 KVM Console Rackmount Keyboard Monitor

HP TFT7600 G2 KVM Console Rackmount Keyboard US Monitor AZ870A  
HP TFT7600 G2 KVM Console Rackmount Keyboard UK Monitor AZ871A  
HP TFT7600 G2 KVM Console Rackmount Keyboard DE Monitor AZ872A  
HP TFT7600 G2 KVM Console Rackmount Keyboard FR Monitor AZ873A  
HP TFT7600 G2 KVM Console Rackmount Keyboard IT Monitor AZ874A  
HP TFT7600 G2 KVM Console Rackmount Keyboard ES Monitor AZ875A  
HP TFT7600 G2 KVM Console Rackmount Keyboard DK Monitor AZ876A  
HP TFT7600 G2 KVM Console Rackmount Keyboard NO Monitor AZ877A  
HP TFT7600 G2 KVM Console Rackmount Keyboard SE/FI Monitor AZ878A  
HP TFT7600 G2 KVM Console Rackmount Keyboard CH Monitor AZ879A  
HP TFT7600 G2 KVM Console Rackmount Keyboard PT Monitor AZ880A  
HP TFT7600 G2 KVM Console Rackmount Keyboard BE Monitor AZ881A  
HP TFT7600 G2 KVM Console Rackmount Keyboard JP Monitor AZ882A  
HP TFT7600 G2 KVM Console Rackmount Keyboard RU Monitor AZ883A  
HP TFT7600 G2 KVM Console Rackmount Keyboard Intl Monitor AZ884A  
HP TFT7600 G2 KVM Console Rackmount Keyboard US TAA Monitor AZ885A

**NOTE:** Please see the QuickSpecs for Technical Specifications and additional information:

[http://h18000.www1.hp.com/products/quickspecs/13731\\_div/13731\\_div.htm](http://h18000.www1.hp.com/products/quickspecs/13731_div/13731_div.htm)  
(Worldwide)

#### HP Server Console Switches

HP Server Console 0x2x8 Port Analog Switch AF616A  
HP Server Console 0x2x16 Port Analog Switch AF617A  
HP TAA 0x2x16xKVM Server Console G2 Switch AF626A  
HP 0x1x8 G3 KVM Console Switch AF651A  
HP 0x2x16 G3 KVM Console Switch AF652A  
HP TAA 0x2x16 G3 KVM Console Switch AF653A  
HP USB Remote Access Key for G3 KVM Console Switches AF650A

**NOTE:** Please see the QuickSpecs for Technical Specifications and additional information:

[http://h18000.www1.hp.com/products/quickspecs/11834\\_div/11834\\_div.htm](http://h18000.www1.hp.com/products/quickspecs/11834_div/11834_div.htm)  
(Worldwide)

#### HP Server Console Switch G2 with Virtual Media & CAC

HP 0x2x16 KVM Server Console Switch G2 with Virtual Media CAC Software AF618A  
HP 0x2x32 KVM Server Console Switch G2 with Virtual Media CAC Software AF619A  
KVM USB Cnsl Ifc Adapter 1PK ALL 336047-B21

**NOTE:** Please see the QuickSpecs for Technical Specifications and additional information:

[http://h18000.www1.hp.com/products/quickspecs/13475\\_div/13475\\_div.htm](http://h18000.www1.hp.com/products/quickspecs/13475_div/13475_div.htm)  
(Worldwide)

#### HP IP Console Switch G2 with Virtual Media & CAC

HP 1x4 USB/PS2 KVM Console Switch AF611A  
HP 1x1Ex8 KVM IP Console Switch G2 with Virtual Media CAC Software AF620A

Additional Options

HP 2x1Ex16 KVM IP Console Switch G2 with Virtual Media CAC Software AF621A  
 HP 4x1Ex32 KVM IP Console Switch G2 with Virtual Media CAC Software AF622A  
**NOTE:** Please see the QuickSpecs for Technical Specifications and additional information:  
[http://h18000.www1.hp.com/products/quickspecs/13474\\_div/13474\\_div.htm](http://h18000.www1.hp.com/products/quickspecs/13474_div/13474_div.htm)  
 (Worldwide)

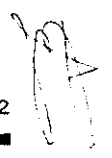
USB and SD Cards

**HP Flash Media Kits for USB Drives**  
**NOTE:** HP qualified blank USB key for use with HP ProLiant servers that support the VMware virtualization environment and other HP value-add software. HP recommends this industry standard USB flash device for use with VMware ESXi. USB device must be installed in the internal slot of the ProLiant server for use with VMware ESXi. Refer to HP VMware Getting Started Guide for installation instructions.  
 HP 8GB USB Enterprise Mainstream Flash Media Drive Key Kit 737953-B21  
**HP Enterprise Mainstream Flash Media Kits for Memory Cards**  
 HP 8GB microSD Enterprise Mainstream Flash Media Kit 726116-B21  
**NOTE:** Please see the QuickSpecs for Technical Specifications and additional information:  
[http://h18000.www1.hp.com/products/quickspecs/13971\\_div/13971\\_div.htm](http://h18000.www1.hp.com/products/quickspecs/13971_div/13971_div.htm)

Proactive Care Services

**Proactive Care**  
**NOTE:** Collaborative Support plus Proactive services delivered by the onshore, local language Advanced Solution Center (ASC), end-to-end case ownership from a Technical Solution Specialists and Technical Account Manager who remotely delivers firmware/software revision management, proactive scans and incident trend reports. Recommended for customers running a virtualized infrastructure and/or customers who desire an enhanced call support experience.  
 HP 3 year 4 hour 24x7 ProLiant ML310e Proactive Care Service U6F73E  
 HP 3 year 4 hour 24x7 with Defective Media Retention ProLiant ML310e Proactive Care Service U6F74E  
 HP 3 year 4-hour 24x7 with Comprehensive Defective Material Retention ML310e Proactive Care Services U9E08E  
**Foundation Care**  
 HP 3 year 24x7 ML310e Foundation Care Service U2FR3E  
 HP 3 year 24x7 with Comprehensive Defective Material Retention ML310e Foundation Care Service U2FR5E  
 HP 3 year 24x7 with Defective Media Retention ML310e Foundation Care Service U2FR4E  
 HP 3 year Next business day ML310e Foundation Care Service U2FR0E  
 HP 3 year Next business day wComprehensiveDefectiveMaterialRetention ML310e Foundation Care Service U2FR2E  
 HP 3 year Next business day with Defective Media Retention ML310e Foundation Care Service U2FR1E  
**Installation Services**  
**NOTE:** Reduce the time required to get your system up and running and help minimize disruptions to your business.  
 HP Install ProLiant ML310e Service U6G21E  
 HP Startup ProLiant ML310e Service U6G23E

ВЯРНО С  
 ОПИДИВАЈА



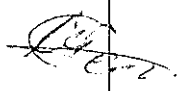
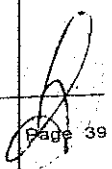
Additional Options



**NOTE:** For more information, customer/resellers can contact:  
<http://www.hp.com/services/carepack>

ВЪРНО С  
ОРИГИНАЛА

000200



Memory

NOTE: Memory configurations listed do not apply to "Factory Integrated Models".

**SmartMemory**

HP SmartMemory now provides additional protection for your servers. With HP Authentication it can verify that you have true HP Qualified Memory in your HP ProLiant Gen8 server. With HP SmartMemory your new HP ProLiant server can take advantage of additional Gen8 enhancements in performance, durability and future manageability support through HP Active Health System.

**DDR3 memory population guidelines**

For detailed memory configuration rules and guidelines, please use the Online DDR3 Memory Configuration Tool: <http://www.hp.com/go/rd3memoryconfigurator>

**General Guidelines:**

- The HP ProLiant ML310e Gen8 v2 Server has four memory slots
- There are two channels per server with two DIMM slots per channel
- Memory channel 1 consists of the two (2) DIMMs that are closest to the processor
- Memory channel 2 consists of the two (2) DIMMs that are furthest from the processor
- Different types of processors have different types of memory support.
- Support for single/dual-rank 1333/1600 MT/s ECC UDIMM (unbuffered DIMMs)
- The server supports up to 32 GB (4 x 8-GB) for Unbuffered DIMMs
- No support for LRDIMMs; RDIMMs; Non-ECC UDIMMs
- Do not install DIMMs if the processor is not installed
- Populate DIMMs from heaviest load (double-rank) to lightest load (single-rank)
- Non-ECC DIMMs are not supported
- Always use HP qualified DIMMs

**ML310e Gen8 v2 Supported Memory Bandwidth and Capacity**

DIMM Type	Unbuffered with ECC DIMMs (UDIMMs)								
	Single Rank (1R)			Dual Rank (2R)					
DIMM Rank	Single Rank (1R)			4GB	4GB	4GB	8GB	8GB	8GB
DIMM Capacity	2GB	2GB	2GB	4GB	4GB	4GB	8GB	8GB	8GB
DIMM Native Speed (MT/s)	1333	1600	1600	1333	1600	1600	1333	1600	1600
Voltage	LV	Std	LV	LV	Std	LV	LV	Std	LV
<b>SLOTS THAT CAN BE POPULATED</b>									
Hot servers	4	4	4	4	4	4	4	4	4
<b>MAXIMUM CAPACITY (GB)*</b>									
	8	8	8	16	16	16	32	32	32
<b>POPULATED DIMM SPEED (MT/s)</b>									
1 DIMM Per Channel	1333	1600	1600	1333	1600	1600	1333	1600	1600
2 DIMM Per Channel	1333**	1600	1600	1333**	1600	1600	1333**	1600	1600

NOTE: Memory speed is a function of the processor QPI bus speed. To realize the performance memory capabilities listed above HP SmartMemory is required.

\* Maximum capacity will vary based on individual server platform qualification schedule

\*\* For HP SmartMemory, UDIMM is supported at 2DPC@1333 at 1.35V. Third party memory may only support up to 2DPC@1066 at 1.5V.

ВЯРНО С  
ОРИГИНАЛА

1A

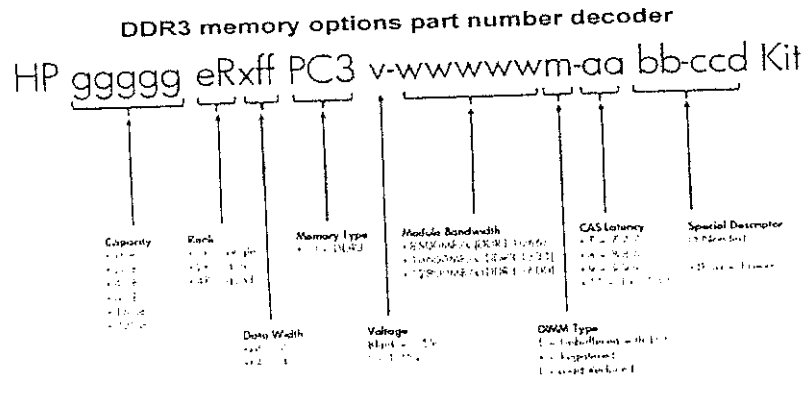
Memory

Memory	Slot			
	DIMM1C	DIMM2A	DIMM3D	DIMM4B
Standard (Performance Model)	8 GB	Empty	8 GB	Empty
Maximum	32 GB	8 GB	8 GB	8 GB

Processor Models	Supported Memory Speeds
3-1220v3, E3-1230v3, E3-1240v4, E3-1270v3	1600/1333

NOTE: Capacity references are rounded to the common Gigabyte values.

- 2GB = 2048MB
- 4GB = 4096MB
- 8GB = 8192MB



Following are memory options available from HP:

HP Memory	Part Number
Unbuffered with ECC DIMMs (UDIMMs)	
HP 2GB (1x2GB) Single Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11 Memory Kit	669320-B21
HP 2GB (1x2GB) Single Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit	647905-B21
HP 2GB (1x2GB) Single Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit	713975-B21
HP 4GB (1x4GB) Dual Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11 Memory Kit	669322-B21
HP 4GB (1x4GB) Dual Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit	647907-B21
HP 4GB (1x4GB) Dual Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit	713977-B21
HP 8GB (1x8GB) Dual Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11 Memory Kit	669324-B21
HP 8GB (1x8GB) Dual Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit	647909-B21
HP 8GB (1x8GB) Dual Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit	713979-B21

ВЯРНО С  
ОРИГИНАЛ

Page 41

000107

Memory

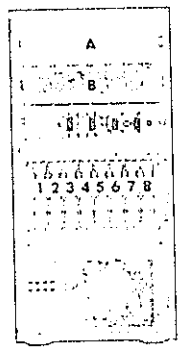
NOTE: All DDR3 memory option kits consist of one DIMM per kit. For detailed memory configuration rules and guidelines, please use the Online DDR3 Memory Configuration Tool: <http://www.hp.com/go/ddr3memoryconfiguration>.

ВЯРНО С  
ОРИГИНАЛА



*[Handwritten mark]*

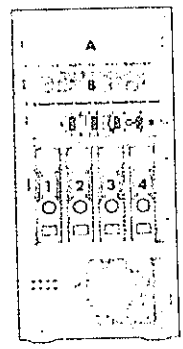
Page



1 - 8 8 x 2.5" (SFF) SAS/SATA hard drive bays

A Removable Optical Drive

B Removable Optical Drive  
**NOTE.** Once Redundant Power Supply is installed, Bay A will be the only media bay available for use.



1 - 4 4 x 3.5" (LFF) SAS/SATA hard drive bays

A Removable Optical Drive

B Removable Optical Drive  
**NOTE.** Once Redundant Power Supply is installed, Bay A will be the only media bay available for use.

ВЕРНО С  
ОРИГИНАЛА



*[Handwritten signature]*

000100

*A*

Technical Specifications

System Unit

<b>Tower Dimensions</b> (H x W x D) (with feet/bezel)	14.5 x 6.89 x 18.71 in (36.82 x 17.5 x 47.52 cm)								
<b>Tower Weight</b> (approximate)	<table border="0"> <tr> <td>Maximum</td> <td>41.8 lb (18.96 kg)</td> </tr> <tr> <td colspan="2">(all hard drives, power supplies, and processors installed)</td> </tr> <tr> <td>Minimum</td> <td>25.29 lb (11.47 kg)</td> </tr> <tr> <td colspan="2">(one hard drive, power supply, and processor installed)</td> </tr> </table>	Maximum	41.8 lb (18.96 kg)	(all hard drives, power supplies, and processors installed)		Minimum	25.29 lb (11.47 kg)	(one hard drive, power supply, and processor installed)	
Maximum	41.8 lb (18.96 kg)								
(all hard drives, power supplies, and processors installed)									
Minimum	25.29 lb (11.47 kg)								
(one hard drive, power supply, and processor installed)									
<b>Input Requirements</b> (per power supply)	<table border="0"> <tr> <td>Rated Line Voltage</td> <td>100 to 240 VAC</td> </tr> <tr> <td>Rated Input Current</td> <td>6 Amps</td> </tr> <tr> <td>Rated Input Frequency</td> <td>47 to 63 Hz</td> </tr> <tr> <td>Rated Input Power</td> <td>440W at 100 V AC input 440W at 200V AC input</td> </tr> </table>	Rated Line Voltage	100 to 240 VAC	Rated Input Current	6 Amps	Rated Input Frequency	47 to 63 Hz	Rated Input Power	440W at 100 V AC input 440W at 200V AC input
Rated Line Voltage	100 to 240 VAC								
Rated Input Current	6 Amps								
Rated Input Frequency	47 to 63 Hz								
Rated Input Power	440W at 100 V AC input 440W at 200V AC input								
<b>BTU Rating</b>	<table border="0"> <tr> <td>Maximum</td> <td>460W - 1773 BTU / hr (at 120 VAC), 1715 (at 240 VAC)</td> </tr> </table>	Maximum	460W - 1773 BTU / hr (at 120 VAC), 1715 (at 240 VAC)						
Maximum	460W - 1773 BTU / hr (at 120 VAC), 1715 (at 240 VAC)								
<b>Power Supply Output</b> (per power supply)	<table border="0"> <tr> <td>Rated Steady-State Power</td> <td>350 W (at 100 VAC), 350 W (at 200 VAC)</td> </tr> <tr> <td>Maximum Peak Power</td> <td>350 W (at 100 VAC), 350 W (at 200 VAC)</td> </tr> </table>	Rated Steady-State Power	350 W (at 100 VAC), 350 W (at 200 VAC)	Maximum Peak Power	350 W (at 100 VAC), 350 W (at 200 VAC)				
Rated Steady-State Power	350 W (at 100 VAC), 350 W (at 200 VAC)								
Maximum Peak Power	350 W (at 100 VAC), 350 W (at 200 VAC)								
<b>System Inlet Temperature</b>	<table border="0"> <tr> <td>Operating</td> <td>10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 304.8 m (1.8°F per every 1000 ft) above sea level to a maximum of 3048 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 10°C/hr (18°F/hr). The upper limit may be limited by the type and number of options installed. System performance may be reduced if operating with a fan fault or above 30°C (86°F).</td> </tr> <tr> <td>Non-operating</td> <td>-30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr).</td> </tr> </table>	Operating	10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 304.8 m (1.8°F per every 1000 ft) above sea level to a maximum of 3048 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 10°C/hr (18°F/hr). The upper limit may be limited by the type and number of options installed. System performance may be reduced if operating with a fan fault or above 30°C (86°F).	Non-operating	-30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr).				
Operating	10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 304.8 m (1.8°F per every 1000 ft) above sea level to a maximum of 3048 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 10°C/hr (18°F/hr). The upper limit may be limited by the type and number of options installed. System performance may be reduced if operating with a fan fault or above 30°C (86°F).								
Non-operating	-30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr).								
<b>Relative Humidity</b> (non-condensing)	<table border="0"> <tr> <td>Operating</td> <td>10 to 90% relative humidity (Rh), 28°C (82.4°F) maximum wet bulb temperature, non-condensing.</td> </tr> <tr> <td>Non-operating</td> <td>5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.</td> </tr> </table>	Operating	10 to 90% relative humidity (Rh), 28°C (82.4°F) maximum wet bulb temperature, non-condensing.	Non-operating	5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.				
Operating	10 to 90% relative humidity (Rh), 28°C (82.4°F) maximum wet bulb temperature, non-condensing.								
Non-operating	5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.								
<b>Altitude</b>	<table border="0"> <tr> <td>Operating</td> <td>3048 m (10,000 ft). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457 m/min (1500 ft/min).</td> </tr> <tr> <td>Non-operating</td> <td>9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min).</td> </tr> </table>	Operating	3048 m (10,000 ft). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457 m/min (1500 ft/min).	Non-operating	9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min).				
Operating	3048 m (10,000 ft). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457 m/min (1500 ft/min).								
Non-operating	9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min).								
<b>Acoustic Noise</b>	Listed are the declared A-Weighted sound power levels (LWAd) and declared average bystander position A-Weighted sound pressure levels (LpAm) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance with ISO 9296								

ВАРНО С  
ОРИГИНАЛА

000110

*[Handwritten signature]*

*A*

Technical Specifications

(ECMA 109).

Idle

L WAd 4.0 B  
L pAm 26dB-A

Operating

L WAd 4.0 B  
L pAm 26dB-A

**NOTE:** The Listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels.

**Emissions Classification (EMC)**

**FCC Rating**

Class B

**Normative Standards**

CISPR 22; EN55022; EN55024; FCC CFR 47, Pt 15; ICES-003; CNS13438; GB9254; K22;K24; EN 61000-3-2; EN 61000-3-3; EN 60950-1; IEC 60950-1

**NOTE:** Product conformance to cited product specifications is based on sample (type) testing, evaluation, or assessment. This product or family of products is eligible to bear the appropriate compliance logos and statements.

HP Dynamic Smart Array B120i Controller

**Dimensions**  
**Disk Drive and Enclosure Interface - Transfer rate**  
**Connectors**  
**Server Interface**  
**SATA Speed**  
**Cache Memory**  
**Logical Drives Supported**  
**Host Memory Addressing**  
**Hot Plug Support**  
**RAID Support**

Embedded  
Up to 6Gb/s SATA (Serial ATA)  
6 internal SATA connectors  
x4 PCIe 2.0  
6Gb/s SATA links  
Zero Memory RAID has no cache memory  
Up to 8 logical volumes (6 physical drives)  
64-bit, supporting greater than 4GB server memory space  
Yes  
RAID 0 (Striping), RAID 1 (Mirroring)  
RAID 1+0 (Striping & Mirroring)

ВЯРНО С  
ОРИГИНАЛА

000111



Technical Specifications

Ethernet 1Gb 2-  
t 332i Adapter

<b>Network Interface</b>	10Base-T/100Base-TX/1000Base-TX	
<b>Compatibility</b>	IEEE 802.3 10Base-T IEEE 802.3ab 1000Base-T IEEE 802.3u 100Base-TX Energy Efficient Ethernet (EEE) compliant with IEEE Std 802.3az (default is disabled)	
<b>Data Transfer Method</b>	PCI-e, two lanes (x2)	
<b>Controller</b>	BCM5720	
<b>Network Transfer Rate</b>	10Base-T (Half-Duplex)	10 Mb/s per port, 20 Mb/s Combined
	10Base-T (Full-Duplex)	20 Mb/s per port, 40 Mb/s Combined
	100Base-TX (Half-Duplex)	100 Mb/s per port, 200 Mb/s Combined
	100Base-TX (Full-Duplex)	200 Mb/s per port, 400 Mb/s Combined
	1000Base-TX (Half-Duplex)	1000Mb/s per port, 2000 Mb/s Combined
	1000 Base-TX (Full-Duplex)	2000Mb/s per port, 4000 Mb/s Combined
<b>Connector</b>	RJ-45	
<b>Cable Support</b>	10Base-T	Categories 3, 4 or 5 UTP; up to 328 ft (100 m)
	10/100/1000Base-TX	Category 5 or better; up to 328 ft (100 m)

Environment-friendly  
products and  
approach

End-of-life  
Management and  
Recycling

Hewlett-Packard offers end-of-life HP product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: <http://www.hp.com/go/green>. To recycle your product, please go to: <http://www.hp.com/go/green> or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: <http://www.hp.com/go/green>. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

ВЕРНО С  
ОРИГИНАЛА

000-12

Summary of Changes

Date	Version History	Action	Description of Change
30-Mar-2015	From Version 22 to 23	Added	New Hard Drives were added to Core Options.
		Removed	Obsolete SKUs removed from HP Processors.
09-Feb-2015	From Version 21 to 22	Added	New Hard Drives, DirectFlow UPS, Rack and Tower G4 Models, LCD8500 1U Rackmount Models and Options were added to the Additional Options section.
		Changed	HP Uninterruptible Power Systems and HP Rack Options in Additional Options section were revised.
09-Feb-2015	From Version 20 to 21	Changed	Versioning matching with Product Bulletin
01-Dec-2014	From Version 19 to 20	Added	HP 1.6TB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive and HP 1.6TB 6G SATA Value Endurance LFF 3.5-in SC Converter Enterprise Value 3yr Wty Solid State Drive were added to HP Hard Drives.
		Removed	Removed two Proactive Care Services (U6F65E and U6F66E), Foundation Care services and Proactive Care Personalized Support Option from HP Care Pack Services.
01-Nov-2014	From Version 18 to 19	Changed	Service and Support section was revised.
29-Sep-2014	From Version 17 to 18	Added	New Solid State Drives were added. HP Managed Power Distribution Units (maPDU) was added to Additional Options.
		Changed	Service and Support section was revised. HP Hard Drives was revised in Core Options section.
09-Sep-2014	From Version 16 to 17	Added	6G SATA Hot Plug SFF VE (2.5-inch) SC EB SSD and 6G SATA Hot Plug SFF VE (2.5-inch) SC EV SSD hard drives were added to Core Options section.
18-Aug-2014	From Version 15 to 16	Added	New Hard Drives were added. HP Remote mPDUs half height version were added.
		Changed	Core Options and Additional Options sections were revised.
10-Jun-2014	From Version 14 to 15	Added	Entry, Base and Performance processors were added to Standard Features. Entry and Performance Pre-configured models were added. Entry and Performance processors were added.
		Changed	Memory, Basic and Remote Power Distribution Units were revised.

*M*

Summary of Changes

18-Apr-2014	From Version 13 to 14	Changed	Memory, HP Insight Software, Basic and Remote Monitoring Power Distribution Units, and HP Care Pack Services were revised.
31-Mar-2014	From Version 12 to 13	Changed	12G SAS High Endurance Hot Plug SFF Enterprise Performance Solid State Drives and 12G SAS Mainstream Endurance Hot Plug SFF Enterprise Mainstream Solid State Drives were added to Hard Drives HP Computation and Graphics Accelerators was added to Core Options HP Insight Software, Storage Controllers and HP USB and SD Options were revised in Additional Options
31-Jan-2014	From Version 11 to 12	Changed	Model descriptions, Tape Backup, and HP USB and SD Options were revised.
Dec-2013	From Version 10 to 11	Changed	HP Insight Control including 1yr 24x7 Support ProLiant MI/DL/BL-bundle FIO Electronic License was added to Step 3 in Configuration Information HP SmartCache and HP H221 PCIe 3.0 SAS Host Bus Adapter were added to Storage Controllers HP Tape and Disk Storage Systems were added to Additional Options HP 8GB USB EM Flash Media Kit was added to HP USB and SD Options HP 1.2TB 6G SAS 10k rpm SFF SC Dual Port Enterprise 3yr Warranty Hard Drive was added and 3G SATA MLC Hot Plug SFF and LFF Enterprise Mainstream Solid State Drives were removed from Hard Drives HP Basic Power Distribution Units and HP Remote Monitoring Power Distribution Unites were revised in Additional Options HP Power Distribution Units were removed from Additional Options
15-Nov-2013	From Version 9 to 10	Changed	Minor change made to the Core Options/ Hard Drives Section.
30-Sep-2013	From Version 8 to 9	Added	Entry and Base Processors were added HP Insight Software was added to Step 3 in Configuration Information - Factory Integrated Models 3G SATA MLC Hot Plug SFF and LFF Enterprise Mainstream Solid State Drives were added to Hard Drives Modular PDUs 1U/0U were added to HP Power Distribution Units HP Remote Monitoring Power Distribution Units was added to Additional Options HP Enterprise Mainstream Flash Media Kits for Memory Cards were added to HP USB and SD Drives

*M*

ВЪРХО С  
ОПТИМАЛНА

*A*

000119



*[Handwritten signature]*

### Summary of Changes

0-Sep-2013	From Version 7 to 8	Changed	HP Dynamic Smart Array B120i Controller in Technical Specifications was revised.
0-Sep-2013	From Version 6 to 7	Changed	Changes made throughout all Memory sections.
12-Aug-2013	From Version 5 to 6	Added	Added the Security section to Additional Options
19-Aug-2013	From Version 4 to 5	Changed / Added	Added the What's New section Changes made in the Standard Features section Changes made throughout all Memory sections The Service and Support section was completely revised. Changes made throughout the Configuration Information section.
15-Jul-2013	From Version 3 to 4	Added	Added the HP Tape Backup section HP Disk Backup was added to Additional Options.
14-Jun-2013	From Version 2 to 3	Changed	Changes made to the Models section only.
12-Jun-2013	From Version 1 to 2	Changed	Changes made to the North America and Canada versions only.

© Copyright 2015 Hewlett-Packard Development Company, L.P.

The information contained herein is subject to change without notice.

Microsoft and Windows NT are US registered trademarks of Microsoft Corporation. Intel is a US registered trademark of Intel Corporation.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

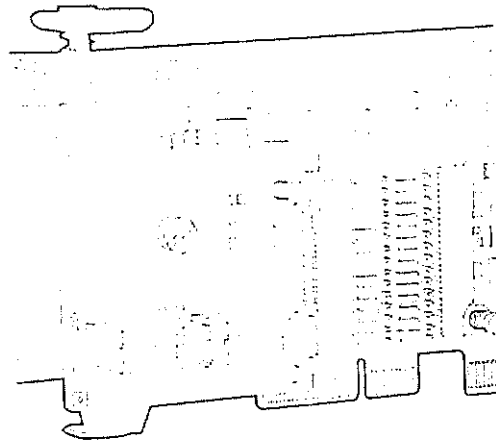
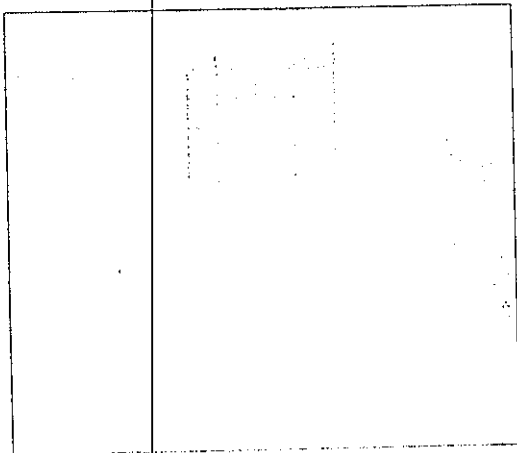
For hard drives, 1GB = 1 billion bytes. Actual formatted capacity is less.

ВЯРНО С  
ОРИГИНАЛА

Review

HP Dynamic Smart Array is a RAID solution combining a storage host bus adapter (HBA) and proprietary software components. Eliminating most of the hardware RAID controller components and relocating advanced RAID algorithms from a hardware-based controller into device driver software lowers the total solution cost, while still maintaining comparable RAID protection and full compatibility with Smart Array disk format, configuration utilities, and management/monitoring software.

HP Dynamic Smart Array controllers share the same easy and consistent UI with standup Smart Array controllers, thus making storage management and deployment easier for IT workers.



Models

HP Dynamic Smart Array RAID Controllers

- HP Dynamic Smart Array B120i Controller
- HP Dynamic Smart Array B320i Controller
- NOTE: Daughter card with HP ProLiant BL420c Gen8.

Embedded on system board  
Embedded on PCI riser or daughter card

ВЯРНО С  
ОРИГИНАЛА



Standard Features

Dynamic Smart Array B120i & B320i

HP's innovative design and integration work of the Smart Array family of products creates customer value that is unmatched in the industry. Use of Smart Array products across multiple applications results in a much lower Total Cost of Ownership (TCO) than any other server storage RAID product. The HP Smart Array family brings an unparalleled return on investment through:

**Data Compatibility** among all models of Smart Array controllers allows simple and easy upgrades any time needs for higher performance, capacity, and availability increase. Even successive generations of Smart Array controllers understand the data format of other Smart Array Controllers.

**Built on embedded controller.** HP Dynamic Smart Array controllers provide critical data protection at a lower cost to customers by building the RAID algorithms into device driver software.

**Performance and data protection innovation.** HP has extended the support of SATA Solid State Disks into the Dynamic Smart Array B120i Controller and support of SAS and SATA Solid State Disks into the Dynamic Smart Array B320i for enhanced performance.

**SmartDrive Carrier** form factor is for use across HP ProLiant Gen8 servers. With compatibility across many enterprise platforms, you are free to deploy and re-deploy these drives to quickly deliver increased storage capacity, migrate data between systems, and easily manage spare drives.

**Standard configuration** and management across all controllers. The Dynamic Smart Array controllers share the same easy and consistent UI with Smart Array controllers, thus making storage management and deployment easier for IT workers.

**Pre-Failure Warranty** means HP Insight Manager not only reports when a drive is going to fail but allows replacement of failing drives prior to actual failure. For complete details, consult the HP Support Center or refer to your HP Server documentation.

Key Features

- Optional 512MB Flash Backed Write Cache (FBWC) (BL420c Gen8, DL160 Gen8, DL360e Gen8, DL380e Gen8, ML350e Gen8)
- System memory used as read cache
- Smart Array RAID engine running in OS driver
- RAID functionality requires driver to be downloaded from HP website for Linux and VMware
- Support for migration of drives to P-Series controllers
- RAID 0, 1, 1+0, Optional RAID 5
- Windows, Linux and VMware support
- Online drive flash support
- Array Configuration Utility (ACU), Systems Insight Manager, and Array Diagnostic Utility (ADU)

Ports

B120i Up to 6 SATA drives  
**NOTE: NO SAS supported.**

B320i Up to 8 SATA drives;  
**NOTE: SAS supported with optional SAS License key.**

ВЯРНО С  
 ОПРИГИНАЛА

Standard Features

Performance

HP's High Performance Architecture sets new boundaries of industry performance expectations!

B120i

- Up to 6Gb/s SATA drive support (600MB/s bandwidth per physical link)
- x2 6Gb/s SATA physical links (compatible with 3Gb/s SATA )  
NOTE: Two SATA ports will be running at 6Gb/s and remaining ports will be running at 3Gb/s.
- 512 MB 40-bit wide DDR3-800MHz flash backed write cache
- write back caching with FBW

B320i

- Up to 6Gb/s SATA or SAS drive support (600MB/s bandwidth per physical link)
- x8 6Gb/s SATA or SAS physical links (compatible with 3Gb/s SATA )
- 512 MB 40-bit wide DDR3-800MHz flash backed write cache
- write back caching with FBWC

Capacity

Given the increasing need for high performance and rapid capacity expansion, the HP Dynamic Smart Array Controllers offer:

- Up to 32TB of total internal storage with 8 x 4TB LFF SATA hard drives
- Up to 9.6TB of total internal storage 8x 1.2TB SFF SAS hard drives (B320i with SAS license)

Availability

Provides increased server uptime by providing advanced storage functionality:

- Online drive firmware upgrade
- Pre-Failure Warranty

Fault Prevention

The following features offer detection of possible failures before they occur, allowing preventive action to be taken:

- S.M.A.R.T.: Self-Monitoring and Reporting Technology first developed at HP detects possible hard disk failure before it occurs, allowing replacement of the hard drive before a real failure occurs.
- Drive Parameter Tracking monitors drive operational parameters, predicting failure and notifying the administrator.
- Dynamic Sector Repairing continually performs background surface scans on the hard disk drives during inactive periods and automatically remaps bad sectors, ensuring data integrity.
- Smart Array Cache Tracking monitors integrity of controller cache, allowing pre-failure preventative maintenance.

ВЯРНО С  
ОРИГИНАЛА

000110



### Standard Features

#### Fault Tolerance

Keeps data available and server running while a failed drive is being replaced; several fault tolerance configurations are supported including:

- **RAID 5** (Distributed Data Guarding): Supported with a minimum of 3 drives. This allocates one set of parity data across drives. This level of fault tolerance can withstand a single drive failure without downtime or data loss.
  - RAID5 is available on the B120i/B320i with 512MB FBWC
- **RAID 1, 1+0, 10** (Drive Mirroring): Supported with a minimum of 2 drives. This allocates half of the drive array to the data and the other half to the mirrored data, providing two copies of the data.

#### Fault Recovery

Minimizes downtime, reconstructs data, and facilitates a quick recovery from drive failure

- DRAM ECC detects and corrects data bit errors.
- Flash Backed Write Cache upgrade provides indefinite data retention.

#### Use of Use

Consistency and Upgradeability make the Smart Array family unique in the industry:

- GUI based configuration, management and diagnostic software tools
- Common data format between generations of products
- Data migration from B-series to P-series controllers

#### Warranty

The warranty for this device is based on the server warranty as it is embedded and part of the server.

**Pre-Failure Warranty:** Drives attached to the Smart Array Controller and monitored under Insight Manager are supported by a Pre-Failure (replacement) Warranty. For complete details, consult the HP Support Center or refer to your HP Server Documentation.

#### Warranty Upgrade Options

- Response - Upgrade on-site response from next business day to same day 4 hours
- Coverage - Extend hours of coverage from 9 hours x 5 days to 24 hours x 7 days
- Duration - Select duration of coverage for a period of 1, 3, or 5 years
- Warranty upgrade options can come in the form of Care Packs, which are sold at the HP System level this product attaches too

ВЯРНО С  
ОПРИТНАЈА

## Compatibility

### Server Compatibility

For up to date compatibility, please see the following URL for complete Smart Array 1 Controller compatibility and support information:  
[http://9529195.www2.hp.com/V2/GetPDF.aspx/4AA3\\_40031\\_NW.pdf](http://9529195.www2.hp.com/V2/GetPDF.aspx/4AA3_40031_NW.pdf)

### Operating Systems

- Microsoft Windows 2012 Server (64 bit)
- Microsoft Windows 2008 Server R2 (64 & 32 bit)
- Red Hat Enterprise Linux 5 (64 & 32 bit)
- Red Hat Enterprise Linux 6
- SUSE Linux Enterprise Server 10 (64 & 32 bit)
- SUSE Linux Enterprise Server 11 (x64 & x86) (64 & 32 bit)
- VMware ESX 4.1 u2
- VMware ESXi 4.1 u2
- VMware ESXi 5.0, 5.0 u1, 5.0 u2, ESXi 5.1

**NOTE:** Please refer to the server QuickSpecs for full support.

**NOTE:** For more Linux OS support & certification information, please visit our the ProLiant & BladeSystem Server Linux matrix:  
<http://918004.www1.hp.com/products/servers/linux/hplinuxcert.html>

### Software Suite

All Smart Array products share a common set of configuration, management and diagnostic tools, including Array Configuration Utility, Array Diagnostic Utility (ADU), and Systems Insight Manager. This software consistency of tools reduces the cost of training for each successive generation of product and takes much of the guesswork out of troubleshooting field problems. These tools lower the total cost of ownership by reducing training and technical expertise necessary to install and maintain HP server storage.

#### Systems Insight Manager

- Powerful server and server options/storage manager tool
- Monitors over 1200 system wide parameters
- Configuration/Diagnostic Utilities

#### HP Array Configuration Utility (ACU)

- Powerful Web based configuration utility for all Smart Array controllers
- Provides a graphical view of HP drive array configurations
- Allows for management of multiple arrays over a secure internet connection from anywhere in the world
- Easy to use Wizards for configuration
- Runs offline for all supported Operating Systems and runs online for Windows and Linux.

#### HP Array Diagnostic Utility (ADU)

- In depth diagnostic and reporting utility for all Smart Array controllers
- Runs offline for all supported Operating Systems, and runs online for Windows and Linux

ВЯРНО С  
ОРИГИНАЛА



000120

Service and Support

Service and Support

### HP Technology Services

HP Technology Services offers you technical consultants and support expertise to solve your most complex infrastructure problems. We help keep your business running, boost availability, and avoid downtime.

### Protect your business beyond warranty with HP Care Pack Services

When you buy HP Options, it's also a good time to think about what level of service you may need. HP Care Pack services provide total care and support expertise with committed response choices designed to meet your IT and business need.

HP Foundation Care services deliver scalable support-packages for HP industry-standard servers and software. You can choose the type and level of service that is most suitable for your business needs. New to this portfolio is HP Collaborative Support. If you are running business critical environments, HP offers Proactive Care or Critical Advantage. These services help you deliver high levels of application availability through proactive service management and advanced technical response.

Here is the support service recommendation from the Foundation Care and Proactive Care portfolio. For customized support service solution, HP can work with you to tailor a service solution for your unique support requirements using broader services portfolio of Foundation Care and Proactive Care.

## Recommended HP Care Pack Services for optimal satisfaction with your HP product

Recommended Services

### 3-Year HP 24x7 4 hour Response, Proactive Care

Helps optimize your systems and delivers high levels of application availability through proactive service management and advanced technical response. A skilled Technical Manager will own your query or issue end to end until resolved, delivering a single point of contact for you

OR

### 3-Year HP 24x7 4 hour Response, HP Collaborative Support

Provides problem resolution support across the stack of HW, firmware, and HP and 3rd party SW. In case the issue is with 3rd party SW, HP does known issue resolution. If HP cannot solve the issue, it will contact the third-party vendor and create a problem incident on your behalf

<http://820195.www2.hp.com/V2/GetPDF.aspx/4AA3-8232ENW.pdf>

### HP Installation of ProLiant Add On Options Service

This easy-to-buy, easy-to-use HP Care Pack service helps ensure that your new HP hardware or software is installed smoothly, efficiently, and with minimal disruption of your IT and business operations

ВЯРНО С  
ОРИГИНАЛА



000111

Service and Support

### Related HP Care Pack Services to enhance your HP product experience

#### Related Services

#### 3-Year HP 24x7 4 hour Response, Proactive Care

Helps optimize your systems and delivers high levels of application availability through proactive service management and advanced technical response. A skilled Technical Manager will own your query or issue end to end until resolved, delivering a single point of contact for you

OR

#### 3-Year HP 24x7 4 hour Response, Hardware Support Onsite Service

Provides you with rapid remote support and if required an HP authorized representative who will arrive on site any time and day of the year to begin hardware maintenance service within 4 hours of the service request being logged

<http://h20195.www2.hp.com/V2/GetPDF.aspx/5982-65471-11.pdf>

#### 3-Year HP 6-hour Onsite Call-to-Repair, HP Collaborative Support

Offers customers a single point of contact for server problem diagnosis, hardware problem resolution to return the hardware in operating condition within 6 hours of the initial service request to the HP Global Solution Center, and basic software problem diagnosis, fault isolation, and resolution if available to HP.

<http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA3-8232ENW.pdf>

#### HP Proactive Select Service

Provides a flexible way to purchase HP best-in-class consultancy and technical services. You can buy Proactive Select Service Credits when you purchase your hardware and then use the credits over the next 12 months. <http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA2-3842ENN.pdf>

#### Insight Remote Support

Provides 24 X 7 remote monitoring, proactive notifications, and problem resolution. Learn more <http://www.hp.com/go/insightremotesupport>

#### HP Support Center

Personalized online support portal with access to information, tools and experts to support HP business products. Submit support cases online, chat with HP experts, access support resources or collaborate with peers. Learn more <http://www.hp.com/go/psa>.

HP's Support Center Mobile App\* allows you to resolve issues yourself or quickly connect to an agent for live support. Now, you can get access to personalized IT support anywhere, anytime.

HP Insight Remote Support and HP Support Center are available at no additional cost with a HP warranty, HP Care Pack or HP contractual support agreement.

\*HP Support Center Mobile App is subject to local availability

#### Parts and materials

HP will provide HP-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements. Supplies and consumable parts will not be provided as part of this service; standard warranty terms and conditions apply. Parts and components that have exceeded their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual or the technical product data sheet will not be provided, repaired or replaced as part of this service.

ВЯРНО С  
ОРИГИНАЛТА



### Service and Support

#### Warranty / Service Coverage

For ProLiant servers and storage systems, this service covers HP-branded hardware options qualified for the server, purchased at the same time or afterward, internal to the enclosure, as well as external monitors up to 22" and tower UPS products; these items will be covered at the same service level and for the same coverage period as the server unless the maximum supported lifetime and/or the maximum usage limitation has been exceeded. Coverage of the UPS battery is not included; standard warranty terms and conditions apply.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by HP due to malfunction. It does not apply to any exchange of Disk or SSD/Flash Drives that have not failed. SSD/Flash Drives that are specified by HP as consumable parts and/or that have exceeded maximum supported lifetime and/or the maximum usage limit as set forth in the manufacturer's operating manual or the technical data sheet are not eligible for the defective media retention service feature option.

#### For more information

To learn more on services for HP ESSN Options, please contact your HP sales representative or HP Authorized Channel Partner. Or visit:  
<http://www.hp.com/services/proliant> or <http://www.hp.com/services/bladeSystem>

**ВЯРНО С  
ОРИГИНАЛА**



Handwritten mark or signature at the bottom left.

Related Options

HP Optional Upgrades

HP Dynamic Smart Array Cache options

HP 512MB B-series 36 inch Dynamic Smart Array Flash Backed Write Cache for ML/DL 631922-B21

HP 512MB B-series Dynamic Smart Array Flash Backed Write Cache with 24 inch Cable 676473-B21

HP Smart Array SAS License Key - for B320i only

HP SAS License Key No Media 1 Svr 1yr 24x7 Support for B320i BC393A

NOTE: This part number can be used to purchase a single license or to order multiple licenses with a single activation key. Customer will receive a printed license entitlement certificate via physical shipment. The license entitlement certificate must be redeemed online or via fax in order to obtain the license activation key(s).

HP SAS License Key No Media Flex 1yr 24x7 Support for B320i BC393B

NOTE: This part number can be used to purchase multiple licenses with a single activation key. Customer will receive a printed license entitlement certificate via physical shipment. The license entitlement certificate must be redeemed online or via fax in order to obtain the license activation key(s).

HP SAS License Key No Media Electronic License for B320i BC393AAE

NOTE: This part number can be used to purchase a single license or to order multiple licenses with a single activation key. Customer will receive a license entitlement certificate via email. The license entitlement certificate must be redeemed online or via fax in order to obtain the license activation key(s).

ВЯРНО С  
ОРИГИНАЛА



Handwritten signature

Handwritten signature

Handwritten signature

000104



Technical Specifications

HP Dynamic Smart Array B120i Controller	Dimensions	Embedded
	Disk Drive and Enclosure Interface - Transfer rate	Up to 6Gb/s SATA (Serial ATA)
	Connectors	6 internal SATA connectors
	Server Interface	x4 PCIe 2.0
	SATA Speed	6Gb/s SATA links
	Cache Memory	Zero Memory RAID has no cache memory
	Logical Drives Supported	Up to 8 logical volumes (6 physical drives)
	Host Memory Addressing	64-bit, supporting greater than 4GB server memory space
	Hot Plug Support	Yes
	RAID Support	RAID 0 (Striping), RAID 1 (Mirroring) RAID 1+0 (Striping & Mirroring)

HP Dynamic Smart Array B320i Controller	Dimensions	Embedded
	Disk Drive Interface - Transfer rate	Up to 6Gb/s SATA (Serial ATA)
	Connectors	2 internal x4 connectors
	Server Interface	x4 PCIe 2.0
	Speed	6Gb/s SAS links
	Cache Memory	Zero Memory RAID has no cache memory optional 40-bit 512MB ECC protected Flash Backed Write Cache (FBWC)
	Logical Drives Supported	Zero Memory, Up to 2 logical volumes (6 physical drives)
	Host Memory Addressing	64-bit, supporting greater than 4GB server memory space
	Hot Plug Support	Yes
	RAID Support	RAID 0 (Striping), RAID 1 (Mirroring) RAID 1+0 (Striping & Mirroring) RAID 5 with optional 512MB FBWC NOTE: 512 MB cache is required to enable RAID 5 support NOTE: SAS mode requires purchase of SAS license key. For more information please visit <a href="http://www.hp.com/go/saslicense">http://www.hp.com/go/saslicense</a>

ВЯРНО С  
ОРИГИНАЛА

000110

### Technical Specifications

Environment-friendly  
Products and  
Approach

End-of-life  
Management and  
Recycling

Hewlett-Packard offers end-of-life HP product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: <http://www.hp.com/go/trade-in>. To recycle your product, please go to: <http://www.hp.com/go/green> or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: <http://www.hp.com/go/green>. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

ВЯРНО С  
ОРИГИНАЛА



Summary of Changes

Date	Version History	Action	Description of Change:
31-Mar-2015	From Version 14 to 15	Removed	Online RAID level migration (between any RAID level/with FBWC) was removed from Availability in Standard Features.
29-Aug-2014	From Version 13 to 14	Changed	Server compatibility link in Compatibility section was updated.  Related Options section was revised.
20-Sep-2013	From Version 12 to 13	Changed	HP Dynamic Smart Array B120i Controller in Technical Specifications was revised.
15-Aug-2013	From Version 11 to 12	Changed	Changes made in Standard Features: Performance
05-Jul-2013	From Version 10 to 11	Changed	Built on embedded controller and Performance and data protection innovation were revised in HP Dynamic Smart Array B120i and B320i  Fault Tolerance was revised in Standard Features  RAID functionality requires driver to be downloaded from HP website for Linux and VMware was added to Key Features
13-May-2013	From Version 9 to 10	Changed	Changes made to the following sections:  Overview- Introduction  Standard Features  Compatibility  Technical Specifications: Update HP Dynamic Smart Array B120i Controller and HP Dynamic Smart Array B320i Controller sections.
29-Apr-2013	From Version 8 to 9	Changed	Technical Specifications: Update HP Dynamic Smart Array B120i Controller and HP Dynamic Smart Array B320i Controller sections.
25-Jan-2013	From Version 7 to 8	Changed	Updated Models  Updated Operating Systems in Compatibility  Added a note in Technical Specifications
17-Dec-2012	From Version 6 to 7	Changed	Description change made in the Technical Specifications section.
07-Nov-2012	From Version 5 to 6	Changed	Corrections were made.
26-Oct-2012	From Version 4 to 5	Changed	Changes made in Standard Features, Compatibility and Technical Specifications sections.
19-Oct-2012	From Version 3 to 4	Changed	Change made to sku description in Related Options section.
06-Jul-2012	From Version 2 to 3	Changed	Change made in Standard Features section.
06-Jun-2012	From Version 1 to 2	Changed	Changed Smart Drive to SmartDrive in Core Options.

ВЪРНО С  
ОРИГИНАЛА

1

## Summary of Changes

© Copyright 2015 Hewlett-Packard Development Company, L.P.

The information contained herein is subject to change without notice. Microsoft and Windows are registered trademarks or trademarks of Microsoft Corporation in the U.S. and/or other countries. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

For hard drives, 1GB = 1 billion bytes. Actual formatted capacity is less.

ВЯРНО С  
ОРИГИНАЛА



000103



# HP Foundation Care Service

## HP Services

### Service feature highlights

- Choice of Foundation Care service-level options
- Escalation management
- HP electronic remote support solution
- Basic Software Support and Collaborative Call Management for non-HP software on eligible HP hardware products
- Access to electronic support information and services
- **Hardware support:**
  - Remote problem diagnosis and support
  - Onsite hardware support
  - Replacement parts and materials
- **Software support:**
  - Access to technical resources
  - License to use software updates
  - Software support
  - Installation advisory support
  - Software features and operational support
  - Software product and documentation updates
  - HP recommended software and documentation updates method
- **Optional service features:**
  - Defective media retention (for eligible hardware products only)
  - Comprehensive defective material retention (for eligible hardware products only)
  - Preventive maintenance (for eligible hardware products only)

### Service overview

HP Foundation Care Service (HP Foundation Care) is composed of comprehensive hardware and software services aimed to help increase the availability of your IT infrastructure. HP technical resources work with your IT team to help you resolve hardware and software problems with HP and selected third-party products.

For hardware products covered by HP Foundation Care, the service includes remote diagnosis and support, as well as onsite hardware repair if it is required to resolve an issue. For eligible HP hardware products, this service may also include Basic Software Support and Collaborative Call Management for selected non-HP software. Contact HP for more information and determination regarding which eligible software products may be included as part of your hardware product coverage. For software products covered by HP Foundation Care, HP provides remote technical support and access to software updates and patches. HP releases updates to software and reference manuals as soon as they are made available for selected HP-supported software products for each system, processor, processor core, and end user, as allowed by HP or the original manufacturer software license. Updates for selected HP-supported third-party software products are included as they are made available from the original software manufacturer.

In addition, HP Foundation Care Service provides electronic access to related product and support information, enabling any member of your IT staff to locate this commercially available essential information. For third-party products, access is subject to availability of information from the original manufacturer.

You can choose from a set of reactive support levels to meet your business and operational needs.

### Specifications

Table 1. Service features

Feature	Delivery specifications
	<p>The HP Foundation Care service-level options noted below are product dependent. Hardware support coverage windows and response times will apply to covered hardware products, and software support coverage windows and response times will apply to covered software products.</p> <p>All coverage windows are subject to local availability. Product eligibility may vary. Contact a local HP sales office for detailed information on service availability and product eligibility.</p> <p>See table 1 for additional features and descriptions.</p>
<b>HP Foundation Care service-level options</b>	<p>For products covered by Foundation Care, HP offers three distinct service levels:</p> <ul style="list-style-type: none"> <li>– HP Foundation Care NBD Service</li> <li>– HP Foundation Care 24x7 Service</li> <li>– HP Foundation Care CTR Service</li> </ul> <p>The HP Foundation Care portfolio also offers the same three service levels with the inclusion of hardware defective media retention (DMR) and comprehensive defective material retention (CDMR) as additional core features. See table 2 for details on DMR and CDMR.</p> <p>The details of the HP Foundation Care service levels are outlined in the text that follows.</p>

ВЯРНО С  
ОРИГИНАЛА

000119

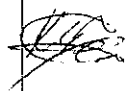


Table 1. Service features (continued)

Feature	Delivery specifications
<b>HP Foundation Care NBD Service</b>	<p>Hardware support:</p> <ul style="list-style-type: none"><li>- Coverage window: Standard business hours, standard business days: Service is available 9 hours per day between 8:00 a.m. and 5:00 p.m. local time, Monday through Friday excluding HP holidays.</li><li>- Onsite response time: Next-business-day onsite response: For incidents with covered hardware that cannot be resolved remotely, HP will use commercially reasonable efforts to respond onsite the next business day. An HP authorized representative will arrive at the Customer's site during the coverage window to begin hardware maintenance service the next coverage day after the call has been received and acknowledged by HP. Onsite response time specifies the period of time that begins when the initial call has been received and acknowledged by HP, as described in the 'General provisions/Other exclusions' section. The onsite response time ends when the HP authorized representative arrives at the Customer's site, or when the reported event is closed with the explanation that HP has determined it does not currently require an onsite intervention. Calls received outside the coverage window will be acknowledged the next coverage day and serviced within the following coverage day.</li></ul> <p>Software support:</p> <ul style="list-style-type: none"><li>- Coverage window: Standard business hours, standard business days: Service is available 9 hours per day between 8:00 a.m. and 5:00 p.m. local time, Monday through Friday excluding HP holidays.</li><li>- Remote response time: Once a software problem is logged, an HP Solution Center engineer will respond to the call within two hours, as noted in the 'Software support' section of Table 1.</li></ul>
<b>HP Foundation Care 24x7 Service</b>	<p>Hardware support:</p> <ul style="list-style-type: none"><li>- Coverage window: 24x7: Service is available 24 hours per day, 7 days per week including HP holidays.</li><li>- 4-hour onsite response: For incidents with covered hardware that cannot be resolved remotely, HP will use commercially reasonable efforts to respond onsite within 4 hours. An HP authorized representative will arrive at the Customer's site during the coverage window to begin hardware maintenance service within four hours of the call having been received and acknowledged by HP. Onsite response time specifies the period of time that begins when the initial call has been received and acknowledged by HP, as described in the 'General provisions/Other exclusions' section. The onsite response time ends when the HP authorized representative arrives at the Customer's site, or when the reported event is closed with the explanation that HP has determined it does not currently require an onsite intervention.</li></ul> <p>Software support:</p> <ul style="list-style-type: none"><li>- Coverage window: 24x7: Service is available 24 hours per day, 7 days per week including HP holidays.</li><li>- Remote response time: Once a software problem is logged, an HP Solution Center engineer will respond to the call within two hours, as noted in the 'Software support' section of Table 1.</li></ul>
<b>HP Foundation Care CTR Service</b>	<p>Hardware support:</p> <ul style="list-style-type: none"><li>- Coverage window: 24x7: Service is available 24 hours per day, 7 days per week including HP holidays.</li><li>- 6-hour call-to-repair time: For critical incidents (Severity 1 or 2), HP will use commercially reasonable efforts to return the covered hardware to operating condition within 6 hours after the initial service request has been received. Availability of call-to-repair times is dependent on the proximity of the Customer site to an HP-designated support hub, as described in the 'Travel zones' section.</li></ul>

ВЯРНО С  
ОРИГИНАЛА

000130

Table 1. Service features (continued)

Feature	Delivery specifications
	<p>For non-critical incidents (Severity 3 or 4), or at the Customer's request, HP will work with the Customer to schedule an agreed-upon time for the remedial action to begin, and the call-to-repair time will then start at that time. Incident severity levels are defined in the 'General provisions/Other exclusions' section.</p> <p>Call-to-repair time refers to the period of time that begins when the initial service request has been received and acknowledged by HP or at the start time for work scheduled in agreement with the Customer, as specified in the 'General provisions/Other exclusions' section. Call-to-repair time ends with HP's determination that the hardware is repaired, or when the service request is closed with the explanation that HP has determined that no onsite intervention is required.</p> <p>Repair is considered complete upon HP verification that the hardware malfunction has been corrected or that the hardware has been replaced. HP is not liable for any lost data, and the Customer is responsible for implementing appropriate backup procedures. Verification by HP may be accomplished by the completion of a power-on self-test, standalone diagnostic, or visual verification of proper operation. At its sole discretion, HP will determine the level of testing necessary to verify that the hardware is repaired. At its sole discretion, HP may temporarily or permanently replace the product in order to meet the call-to-repair time. Replacement products are new or functionally equivalent to new in performance. Replaced products become the property of HP.</p> <p>It will take 30 days from the time this service is purchased to set up and perform necessary audits and processes so that the hardware call-to-repair time can be put in effect. During this initial 30-day period and for up to 5 additional business days after the audit is completed, HP will provide a 4-hour onsite response time.</p> <p><b>Enhanced parts inventory management</b></p> <p>To support HP call-to-repair times, an inventory of critical replacement parts is maintained for Customers who have selected the call-to-repair option. This inventory is stored at an HP-designated facility. These parts are managed to allow for increased inventory availability and are accessible to HP authorized representatives responding to eligible service requests.</p> <p>Software support:</p> <ul style="list-style-type: none"> <li>- Coverage window: 24x7: Service is available 24 hours per day, 7 days per week including HP holidays.</li> <li>- Remote response time: Once a software problem is logged, an HP Solution Center engineer will respond to the call within two hours, as noted in the 'Software support' section of table 1.</li> </ul>
	<p>The HP Foundation Care support features noted below are product dependent. HP will provide the hardware support features for covered hardware products and the software support features for covered software products.</p>
<b>Escalation management</b>	<p>HP has established formal escalation procedures to facilitate the resolution of complex problems. Local HP management coordinates problem escalation by enlisting the skills of appropriate HP resources to assist the Customer with problem-solving. For selected third-party software products for which HP is providing software support and update services, HP will follow the agreed-upon escalation processes established between HP and the third-party vendor to assist with problem resolution.</p>
<b>HP electronic remote support solution</b>	<p>For eligible products, the HP electronic remote support solution provides robust troubleshooting and repair capabilities. It can include remote system access solutions and may offer a convenient central point of administration and an enterprise view of open incidents and history. An HP support specialist will only use the remote system access with the Customer's authorization. The remote system access may enable the HP support specialist to provide more efficient troubleshooting and faster problem resolution.</p>

ВЯРНО С  
ОРИГИНАЛА

**Table 1. Service features (continued)**

<b>Feature</b>	<b>Delivery specifications</b>
<b>Basic Software Support and Collaborative Call Management for non-HP software on eligible HP hardware products</b>	<p>In cases where the Customer has not purchased HP Foundation Care support on selected non-HP software products that reside on eligible hardware equipment covered by HP Foundation Care support, HP will provide the Basic Software Support and Collaborative Call Management features as described below, instead of Foundation Care software support as described in the "Software support" section of table 1.</p> <p>Basic Software Support on selected non-HP software products is limited to the following: HP will attempt to resolve problems on these products by applying or asking the Customer to apply fixes that have been made available or known to HP. In some cases, support may be limited to communication of a known fix available through the installation of a software update or patch, and the Customer will be directed to available sources for the applicable updates or patches because access to the known fix requires additional service contracts with the respective software vendor. If the problem is still not resolved, then Collaborative Call Management can be initiated at the Customer's request. Basic Software Support is available 24 hours per day, 7 days per week.</p> <p>If HP determines that a problem is caused by a selected independent vendor's software and the problem is not resolved by the Customer applying known, available fixes, HP will, at the Customer's request, initiate Collaborative Call Management with the independent software vendor. Collaborative Call Management can be provided only in cases where appropriate active support agreements are in place with selected vendors and the Customer has taken the steps necessary to ensure that HP can submit calls on the Customer's behalf for the limited purpose of placing a support call with the vendor. HP will engage the software vendor and provide information about the Customer's issue, as obtained during the Basic Software Support service call. It is then the responsibility of the independent software vendor to resolve the Customer issue. Once the call is transitioned to the independent software vendor, the call will be subject to the support levels of the agreement between the Customer and the independent vendor.</p> <p>Once the software vendor is engaged, HP will close the HP call, but the Customer can resume the service issue with HP if needed by referencing the original call identification number.</p> <p>Note: For a list of the non-HP software products eligible for Basic Software Support and Collaborative Call Management, please refer to <a href="http://www.hp.com/go/collaborativesupport">www.hp.com/go/collaborativesupport</a>.</p>
<b>Access to electronic support information and services</b>	<p>As part of this service, HP provides the Customer with access to certain commercially available electronic and Web-based tools. The Customer has access to:</p> <ul style="list-style-type: none"> <li>• Certain capabilities made available to registered users with linked entitlements, such as downloading selected HP software patches and firmware updates, subscribing to hardware-related proactive service notifications, and participating in support forums for solving problems and sharing best practices with other registered users</li> <li>• Expanded Web-based searches of technical support documents to facilitate faster problem-solving</li> <li>• Certain HP proprietary service diagnostic tools with password access</li> <li>• A Web-based tool for submitting questions directly to HP; the tool helps to resolve problems quickly with a pre-qualification process that routes the support or service request to the resource qualified to answer the question; the tool also allows the status of each support or service request submitted to be viewed, including cases submitted by telephone</li> <li>• HP and third-party hosted knowledge databases for certain third-party products, where Customers can search for and retrieve product information, find answers to support questions, participate in support forums, and download software updates; this service may be limited by third-party access restrictions</li> <li>• The Software Updates and Licensing portal, which provides the Customer with electronic access to receive, proactively manage, and plan for software product updates; access to the portal is through the HP Support Center.</li> </ul>

**ВЪРНО С  
ОРИГИНАЛА**

000132



Table 1. Service features (continued)

Feature	Delivery specifications
<b>Hardware support</b>	
<b>Remote problem diagnosis and support</b>	<p>Once the Customer has placed and HP has acknowledged the receipt of a call as described in the "General provisions/Other exclusions" section, HP will work during the coverage window to isolate the hardware incident and to remotely troubleshoot, remedy, and resolve the incident with the Customer. Prior to any onsite assistance, HP may initiate and perform remote diagnostics using electronic remote support solutions to access covered products, or HP may use other means available to facilitate remote incident resolution.</p> <p>HP will provide telephone assistance for the installation of customer-installable firmware and Customer Self Repair (CSR) parts during the service coverage window.</p> <p>Regardless of the Customer's coverage window, incidents with covered hardware can be reported to HP via telephone or Web portal, as locally available, or as an automated equipment reporting event via the HP electronic remote support solutions 24 hours a day, 7 days a week. HP will acknowledge the receipt by logging the call, assigning a case ID, and communicating that case ID to the Customer. HP retains the right to determine the final resolution of all reported incidents.</p>
<b>Onsite hardware support</b>	<p>For hardware incidents that cannot, in HP's judgment, be resolved remotely, an HP authorized representative will provide onsite technical support on covered hardware products to return them to operating condition. For certain products, HP may, at its sole discretion, elect to replace such products in lieu of repairing them. Replacement products are new or functionally equivalent to new in performance. Replaced products become the property of HP.</p> <p>Once an HP authorized representative arrives at the Customer's site, the representative will continue to deliver the service, either onsite or remotely, at the discretion of HP, until the products are repaired. Work may be temporarily suspended if parts or additional resources are required, but work will resume when they become available. Work to completion may not apply to onsite support provided for desktop, mobile, and consumer products.</p> <p>Repair is considered complete upon HP verification that the hardware malfunction has been corrected or that the hardware has been replaced.</p> <p><b>"Fix-on-Failure":</b> In addition at time of onsite technical support delivery, HP may:</p> <ul style="list-style-type: none"> <li>• Install available engineering improvements to help the Customer ensure proper operation of the hardware products and maintain compatibility with HP-supplied hardware replacement parts.</li> <li>• Install available firmware updates defined by HP as non-customer-installable that, in the opinion of HP, are required to return the covered product to operating condition or to maintain supportability by HP and for which the Customer has the required license to use, if applicable.</li> </ul> <p><b>"Fix-on-Request":</b> In addition, at the Customer's request, HP will install during coverage hours critical firmware updates defined by HP as non-customer-installable and for which the Customer has the required license to use, if applicable. Critical firmware updates are firmware updates recommended by the HP product division for immediate installation.</p> <p>Notwithstanding anything to the contrary in this document or HP's current standard sales terms, HP will, for select enterprise storage arrays and enterprise tape products, cover and replace defective or depleted batteries that are critical to the proper operation of the covered product.</p>

ВЯРНО С  
ОРИГИНАЛА

000133

**Table 1. Service features (continued)**

<b>Feature</b>	<b>Delivery specifications</b>
<b>Replacement parts and materials</b>	<p>HP will provide HP-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available engineering improvements required by HP to assure supportability of the product. Replacement parts provided by HP shall be new or functionally equivalent to new in performance. Replaced parts become the property of HP. Customers who wish to retain, degauss, or otherwise physically destroy replaced parts will be billed and required to pay the list price for the replacement part. Supplies and consumable parts are not supported and will not be provided as part of this service; standard warranty terms and conditions apply to supplies and consumable parts.</p> <p><b>Maximum supported lifetime/maximum usage:</b></p> <p>Parts and components that have exceeded their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product QuickSpecs, or the technical product data sheet will not be provided, repaired, or replaced as part of this service.</p>
<b>Software support</b>	
<b>Access to technical resources</b>	<p>The Customer can access HP technical resources via telephone, electronic communication, or fax (where locally available) for assistance in resolving software implementation or operations problems.</p>
<b>License to use software updates</b>	<p>The Customer receives the license to use software updates to HP or HP-supported third-party software for each system, socket, processor, processor core, or end-user software license covered by this service, as allowed by the original HP or original manufacturer software license terms, provided the Customer has rightfully acquired the original software license.</p> <p>The license terms shall be as described in the HP software licensing terms corresponding to the Customer's prerequisite underlying software license, or in accordance with the current licensing terms of the third-party software manufacturer, if applicable, including any additional software licensing terms that may accompany such software updates provided under this service.</p> <p>For certain third-party products, instead of purchasing an initial software product license, this service provides the Customer with the ability to download from a website, hosted by HP or a third-party vendor, the current revision of the software and all software updates released during the support agreement period.</p>
<b>Software support</b>	<p>Once a software problem is logged, an HP Solution Center engineer will respond to the call within two hours. Calls received and answered outside the service coverage window will be logged the next day for which the Customer has a service coverage window (may vary by geographic location). HP provides corrective support to resolve identifiable and customer-reproducible software product problems. HP also provides support to help the Customer identify problems that are difficult to reproduce. In addition, the Customer receives assistance in troubleshooting problems and determining configuration parameters for supported configurations.</p>
<b>Installation advisory support</b>	<p>Limited advisory support is provided and is restricted to basic advisory assistance for the Customer who encounters difficulties while performing a software product installation or who needs advice on proper installation methods and updating of standalone applications. Limited advisory support for software products that are installed in a network environment is also provided. The scope of such advisory support is at HP's discretion.</p> <p>Exclusions to this advisory support include, but are not limited to, the following: any downloading of complete software packages or walking the Customer through an installation from start to finish. These services are available for an additional charge and can be purchased separately from HP.</p>

**ВЯРНО С  
ОРИГИНАЛА**

000104

**Table 1. Service features (continued)**

Feature	Delivery specifications
<b>Software features and operational support</b>	HP provides information, as commercially available, on current product features, known problems and available solutions, and operational advice and assistance.
<b>Software product and documentation updates</b>	<p>As HP releases updates to HP software, the latest revisions of the software and reference manuals are made available to the Customer. For selected third-party software, HP will provide software updates as such updates are made available from the third party, or HP may provide instructions on how the Customer can obtain any software updates directly from the third party. A license key or access code, or instructions for obtaining a license key or access code, will also be provided to the Customer when required to download, install, or run the latest software revision.</p> <p>For most HP software and selected HP-supported third-party software, updates will be made available through the Software Updates and Licensing portal via the HP Support Center. The Software Updates and Licensing portal provides the Customer with electronic access to receive and proactively manage software product and documentation updates.</p> <p>For other HP-supported third-party software, the Customer may be required to download updates directly from the vendor's website.</p>
<b>HP recommended software and documentation updates method</b>	For HP or HP-supported third-party software and documentation updates, the recommended delivery method will be determined by HP. The primary delivery method for software updates and documentation updates will be via download from the Software Updates and Licensing portal or a third-party hosted website.

**Table 2. Optional service features**

Feature	Delivery specifications
	<p>The Foundation Care portfolio also offers the following additional service levels:</p> <ul style="list-style-type: none"> <li>• HP Foundation Care NBD w DMR Service</li> <li>• HP Foundation Care 24x7 w DMR Service</li> <li>• HP Foundation Care CTR w DMR Service</li> </ul>
<b>Defective media retention</b>	For eligible products, this service feature option allows the Customer to retain defective hard disk or eligible SSD/Flash drive components that the Customer does not want to relinquish due to sensitive data contained within the disk ("Disk or SSD/Flash Drive") covered under this service. All Disk or eligible SSD/Flash Drives on a covered system must participate in the defective media retention.
<b>Comprehensive defective material retention</b>	In addition to defective media retention, this service feature option allows the Customer to retain additional components that have been designated by HP as having data retentive capabilities, such as memory modules. All eligible data retentive components on a covered system must participate in the comprehensive defective material retention. The components that can be retained under this service feature are outlined in the document located at <a href="http://www.hp.com/services/cdmr">www.hp.com/services/cdmr</a> .

**ВЯРНО С  
ОРИГИНАЛА**

**Table 2. Optional service features (continued)**

Feature	Delivery specifications
<b>Optional features available only with HP Contractual Services:</b>	
<b>Preventive maintenance</b>	<p>An HP authorized representative visits the Customer's site at regularly scheduled intervals as determined by HP. The Customer shall call HP to request and schedule a preventive maintenance visit at the agreed-upon intervals.</p> <p>During the visit, the HP authorized representative, at their discretion, will determine the level of checking that will be performed for preventive maintenance services such as diagnostics, checking error logs on covered systems to find potential hardware problems, and, if necessary, addressing mechanical or electronic system complaints and cleaning or replacing worn or defective parts or maintenance items.</p> <p>The representative may also check for potential problems by inspecting cables and cable connections or visual status indicators of covered hardware, checking temperature and humidity levels and comparing them to vendors' recommendations, and installing applicable engineering improvements and firmware updates as required, in the opinion of HP, to maintain the hardware product. The representative may provide a final report on the hardware's condition.</p> <p>Preventive maintenance services will be delivered between 8:00 a.m. and 5:00 p.m. local time, Monday through Friday excluding HP holidays, regardless of the selected coverage window.</p> <p>Availability and deliverables may vary by region.</p>
<p><b>Information in the following sections covers all features available with both HP Foundation Care Pack services and HP Foundation Care contractual services.</b></p>	

### Service limitations

HP retains the right to determine the final resolution of all service requests.

At the discretion of HP, service will be provided using a combination of remote diagnosis and support, services delivered onsite, and other service delivery methods. Other service delivery methods may include the delivery via a courier of customer-replaceable parts such as a keyboard, a mouse, certain hard disk drives, and other parts classified by HP as CSR parts, or an entire replacement product. HP will determine the appropriate delivery method required to provide effective and timely Customer support and meet the call-to-repair time, if applicable.

If the Customer agrees to the recommended CSR and a CSR part is provided to return the system to operating condition, the onsite service level shall not apply. In such cases, HP practice is to express ship to the Customer location the CSR parts that are critical to the product's operation. For more details on the CSR process and parts, please refer to [www.hp.com/go/selfrepair](http://www.hp.com/go/selfrepair).

Call-to-repair and onsite response times do not apply to the repair or replacement of defective or depleted batteries for selected enterprise storage arrays and enterprise tape products.

**ВЯРНО С  
ОРИГИНАЛА**

Activities such as, but not limited to, the following are excluded from this service:

- Services required due to failure of the Customer to incorporate any system fix, repair, patch, or modification provided to the Customer by HP
- Services that, in the opinion of HP, are required due to unauthorized attempts by non-HP personnel to install, repair, maintain, or modify hardware, firmware, or software
- Operational testing of applications, or additional tests requested or required by the Customer
- Services that, in HP's opinion, are required due to improper treatment or use of the products or equipment
- Services required due to failure of the Customer to take avoidance action previously advised by HP
- Backup and recovery of the operating system, other software, and data
- Installation of any customer-installable firmware and/or software updates
- Troubleshooting for interconnectivity or compatibility problems
- Support for network-related problems

**Hardware onsite support;**

An onsite response time will not apply if the service can be delivered using remote diagnosis, remote support, or other service delivery methods previously described.

Response times are dependent on the location of your site in relation to a designated HP support office. To check service availability, please contact your local HP Services representative.

For technical hardware issues that cannot, in HP's judgment, be resolved remotely, an HP authorized representative will provide onsite technical support on covered hardware products to return them to operating condition. For certain products, HP may, at its sole discretion, elect to replace such products in lieu of repairing them. Replacement products are new or functionally equivalent to new in performance. Replaced products become the property of HP.

**Hardware call-to-repair**

If an upfront audit is required by HP, the hardware call-to-repair time will not take effect until five (5) business days after the audit has been completed. In addition, HP reserves the right to downgrade service to an onsite response time or cancel the service contract if critical audit suggestions are not followed or the audit is not performed within the specified timeframe.

The hardware repair time may vary for specific products.

A call-to-repair time does not apply when the Customer chooses to have HP perform diagnosis rather than execute recommended server recovery procedures.

If the Customer requests scheduled service, the repair timeframe begins from the agreed-upon scheduled time.

ВЪРНО С  
ОРИГИНАЛА

The following activities or situations will suspend the call-to-repair time calculation (if applicable) until they are completed or resolved:

- Any Customer or third-party action or inaction impacting the repair process
- Any automated recovery processes triggered by the hardware malfunction, such as disk mechanism rebuild or sparing procedures
- Any other activities not specific to the hardware repair but which are required to verify that the hardware malfunction has been corrected, such as rebooting the operating system

HP reserves the right to modify the call-to-repair time as it applies to the Customer's specific product configuration, location, and environment. This is established at the time of the support agreement order and is subject to resource availability.

**Collaborative Call Management for non-HP software**

The Customer must have appropriate, active support agreements in place with selected vendors and take any steps necessary to ensure that HP can submit calls on Customer's behalf for the limited purpose of placing a support call with the vendor. HP will not be able to transfer the existing HP case number to the vendors and assumes no responsibility for failure to do so. HP is not liable for the performance or non-performance of third-party vendors, their products, or their support services. HP's obligations are limited to the placement of support calls only, and purchase of this service does not assign the support agreement between the Customer and vendor to HP. The Customer is still responsible for performance of its obligations under such agreements, including payment of all applicable fees, including any fees that may apply as a result of logging calls with the vendor.

**Defective media retention and comprehensive defective material retention**

The defective media retention and comprehensive defective material retention service feature options apply only to eligible data retentive components replaced by HP due to malfunction. They do not apply to any exchange of data retentive components that have not failed.

Data retentive components that are specified by HP as consumable parts and/or that have exceeded the maximum supported lifetime and/or the maximum usage limit as set forth in the manufacturer's operating manual, the product QuickSpecs, or the technical data sheet are not eligible for the defective media retention or the comprehensive defective material retention service feature option.

Defective media retention service and comprehensive defective material retention service coverage for options designated by HP as requiring separate coverage, if available, must be configured and purchased separately.

Failure rates on these components are constantly monitored, and HP reserves the right to cancel this service with 30 days' notice if HP reasonably believes that the Customer is overusing the defective media retention or comprehensive defective material retention service feature option (such as when replacement of defective data retentive components materially exceeds the standard failure rates for the system involved).

HP SHALL HAVE NO OBLIGATION WHATSOEVER WITH RESPECT TO THE CONTENTS OF OR THE DESTRUCTION OF ANY DATA RETENTIVE COMPONENT RETAINED BY THE CUSTOMER. NOTWITHSTANDING ANYTHING IN HP'S CURRENT STANDARD SALES TERMS OR THE TECHNICAL DATA SHEET TO THE CONTRARY, IN NO EVENT WILL HP OR ITS AFFILIATES, SUBCONTRACTORS, OR SUPPLIERS BE LIABLE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR DAMAGES FOR LOSS OF OR MISUSE OF DATA UNDER THIS DEFECTIVE MEDIA RETENTION OR COMPREHENSIVE DEFECTIVE MATERIAL RETENTION SERVICE.

ЭЯРНО С  
ЭИИГИИНАПА

### Software support

Software updates are not available for all software products. When this service feature is not available, it will not be included in this service.

For some products, software updates include only minor improved features. New software versions must be purchased separately.

### Travel zones

All hardware onsite response times apply only to sites located within 25 miles (40 km) of an HP-designated support hub. Travel to sites located within 200 miles (320 km) of an HP-designated support hub is provided at no additional charge. If the site is located more than 200 miles (320 km) from the HP-designated support hub, there will be an additional travel charge. Travel zones and charges may vary in some geographic locations. Response times to sites located more than 100 miles (160 km) from an HP-designated support hub will be modified for extended travel, as shown in the table that follows.

Travel zones and charges, if applicable, may vary in some geographic locations.

Distance from HP-designated support hub	4-hour hardware onsite response time	Next-day hardware onsite response time
0-50 miles (0-80 km)	4 hours	Next coverage day
51-100 miles (81-160 km)	4 hours	Next coverage day
101-200 miles (161-320 km)	8 hours	1 additional coverage day
201-300 miles (321-480 km)	Established at time of order and subject to availability	2 additional coverage days
More than 300 miles (480+ km)	Established at time of order and subject to availability	Established at time of order and subject to availability

A hardware call-to-repair time is available for sites located within 50 miles (80 km) of an HP-designated support hub. Travel zones and charges may vary in some geographic locations. The hardware call-to-repair time is not available for sites located more than 100 miles (160 km) from an HP-designated support hub. For sites that are located from 51 to 100 miles (81 to 160 km) of an HP-designated support hub, an adjusted hardware call-to-repair time applies, as shown in the table that follows.

Distance from HP-designated support hub	6-hour hardware call-to-repair time
0-50 miles (0-80 km)	6 hours
51-100 miles (81-160 km)	8 hours
More than 100 miles (160+ km)	Not available

### Prerequisites

HP, at its sole discretion, may require an audit on the covered products. If such an audit is required, an HP authorized representative will contact the Customer, and the Customer will agree to arrange for an audit to be performed within the initial 30-day timeframe. During the audit, key system configuration information is collected and an inventory of the covered products is performed. The information gathered in the audit enables HP to plan and maintain replacement part inventories at the appropriate level and location, and allows HP to survey and troubleshoot possible future hardware incidents so that repairs can be completed as quickly and efficiently as possible. At the sole discretion of HP, the audit may be performed onsite, via remote system access, via remote audit tools, or over the phone.

**ВЕРНО С  
ОРИГИНАЛА**

000139

If an audit is required by HP, it will take 30 days from the time this service is purchased to set up and perform the audits and processes that must be completed before the hardware call-to-repair time can be put into effect. The hardware call-to-repair time will not take effect until five (5) business days after the audit has been completed. Until such time, service for the covered hardware will be delivered at a 4-hour onsite response time service level.

In addition, HP reserves the right to downgrade service to an onsite response time or cancel the service contract if critical audit suggestions are not followed or the audit is not performed within the specified timeframe, unless the delay is caused by HP.

For hardware onsite response time options, HP strongly recommends that the Customer install and operate the appropriate HP remote support solution, with a secure connection to HP, in order to enable the delivery of the service. For hardware call-to-repair times, HP requires that the Customer install and operate the appropriate HP remote support solution, with a secure connection to HP, in order to enable the delivery of the service. Please contact a local HP representative for further details on requirements, specifications, and exclusions. If the Customer does not deploy the appropriate HP remote support solution, HP may not be able to provide the service as defined and is not obligated to do so.

Additional charges will be applied for onsite installation of non-customer-installable firmware if the Customer does not deploy the required remote support solution in cases where they are recommended and available. Installation of customer-installable firmware is the responsibility of the Customer. There will be additional charges if the Customer requests that HP install customer-installable firmware and software updates. Any additional charges to the Customer will be on a time and material basis, unless otherwise previously agreed to in writing by HP and the Customer.

To be eligible to purchase this service, the Customer must be properly licensed to use a currently supported revision of the software at the time the support agreement coverage begins; otherwise, additional charges may be applied to bring the Customer into service eligibility.

For Customers with licenses to firmware-based software products (features implemented in firmware activated by the purchase of a separate software license product) or licensed firmware, the Customer must also have, if available, an active HP Foundation Care Support agreement for that product to receive, download, install, and use related firmware updates. HP will provide, install, or assist the Customer with the installation of firmware updates as previously described in this document only if the Customer has the license to use the related software updates for each system, socket, processor, processor core, or end-user software license as allowed by the original HP or original manufacturer software license terms.

## Customer responsibilities

If the Customer does not act upon the specified Customer responsibilities, HP or the HP authorized service provider will, at HP's discretion, i) not be obligated to deliver the services as described or ii) perform such service at the Customer's expense at the prevailing time and materials rates.

The Customer must provide accurate and complete information in a timely manner as required for HP to perform the services.

The call-to-repair time is subject to the Customer providing immediate and unrestricted access to the system, as requested by HP. The call-to-repair time does not apply when system access, including physical, remote troubleshooting, and hardware diagnostic assessments, is delayed or denied. If the Customer requests scheduled service, the call-to-repair time period begins at the agreed-upon scheduled time.

ВЯРНО С  
ОРИГИНАЛА



4

*[Handwritten signature]*

Upon HP's request, the Customer will be required to support HP's remote problem resolution efforts. The Customer will:

- Start self-tests and install and run other diagnostic tools and programs
- Install customer-installable software and firmware updates and patches
- Run data collection 'scripts' on behalf of HP when they cannot be initiated from HP Remote Support Technology
- Provide all information necessary for HP to deliver timely and professional remote support and to enable HP to determine the level of support eligibility
- Perform other reasonable activities to help HP identify or resolve problems, as requested by HP

The Customer is responsible for installing, in a timely manner, critical customer-installable firmware updates, as well as CSR parts and replacement products delivered to the Customer.

There will be additional charges if the Customer requests that HP install customer-installable firmware and software updates. Any additional charges to the Customer will be on a time and materials basis, unless otherwise previously agreed to in writing by HP and the Customer.

The Customer is responsible for installing and configuring all supported devices and maintaining the appropriate HP Remote Support Technology with a secure connection to HP. The Customer is responsible for providing all necessary resources in accordance with the HP remote support solution release notes in order to enable the delivery of the service and options. The Customer must also provide any hardware required to host the remote support solution. When an HP remote support solution is installed, the Customer must also maintain the contact details configured in the remote support solution that HP will use in responding to a device failure. The Customer should contact a local HP representative for further details on requirements, specifications, and exclusions. For scheduled calls, the Customer shall promptly make the equipment available to HP for remedial activities at the agreed-upon time.

In cases where CSR parts or replacement products are shipped to resolve a problem, the Customer is responsible for returning the defective part or product within a time period designated by HP. In the event that HP does not receive the defective part or product within the designated time period or if the part or product is degaussed or otherwise physically damaged upon receipt, the Customer will be required to pay the HP list price less any applicable discounts for the defective part or product, as determined by HP.

In order for HP to provide Collaborative Call Management, the Customer must have an active support agreement with the software vendor that includes the required service level and features that allow the Customer to place calls and receive support from the vendor. If the vendor requires it, the Customer will take any steps necessary to ensure that HP can submit calls on the Customer's behalf. In addition, the Customer must provide HP with the appropriate information needed for HP to initiate a service call with the software vendor on behalf of the Customer. HP will not be able to transfer calls to the vendor and assumes no responsibility for failure to do so. HP's obligations are limited to the placement of support calls only. Purchase of Collaborative Call Management does not assign the support agreement between the Customer and vendor to HP. The Customer remains responsible for the performance of its obligations under such agreements, which include payment of all applicable fees, including any fees that may apply as a result of logging calls with the vendor. HP is not liable for the performance or non-performance of third-party vendors, their products, or their support services.

*[Handwritten signature]*

**ВЯРНО С  
ОРИГИНАЛА**

*[Handwritten signature]*

*[Handwritten signature]*

Handwritten mark at the top right corner.

Handwritten signature on the left side of the page.

The Customer will:

- Take responsibility for registering to use the HP or third-party vendor's electronic facility in order to access knowledge databases and obtain product information; HP will provide registration information to the Customer as required; additionally, for certain products, the Customer may be required to accept vendor-specific terms for use of the electronic facility
- Retain and provide to HP upon request, all original software licenses, license agreements, license keys, and subscription service registration information, as applicable for this service
- Take responsibility for acting upon software product updates and obsolescence notifications received from the HP Support Center
- Use all software products in accordance with current HP software licensing terms corresponding to the Customer's prerequisite underlying software license, or in accordance with the current licensing terms of the third-party software manufacturer, if applicable, including any additional software licensing terms that may accompany such software updates provided under this service

If required by HP, the Customer or HP authorized representative must activate the hardware product to be supported within 10 days of purchase of this service, using the registration instructions within the Care Pack documentation or the email document provided by HP, or as otherwise directed by HP. In the event that a covered product changes location, activation and registration (or proper adjustment to existing HP registration) is to occur within 10 days of the change.

The Customer is responsible for the security of the Customer's proprietary and confidential information. The Customer is responsible for properly sanitizing or removing data from products that may be replaced and returned to HP as part of the repair process to ensure the safeguarding of the Customer's data. For more information on Customer responsibilities, including those outlined in the HP Media Sanitization Policy and Media Handling Policy for Healthcare Customers, go to [www.hp.com/go/mediahandling](http://www.hp.com/go/mediahandling).

If the Customer chooses to retain repair parts covered under the defective media retention and/or comprehensive defective material retention service feature options, it is the Customer's responsibility to:

- Retain physical control of the covered data retentive components at all times during support delivery by HP; HP is not responsible for data contained on the covered data retentive component
- Ensure that any Customer sensitive data on the retained covered data retentive component is destroyed or remains secure
- Have an authorized representative present to retain the defective data retentive component, accept the replacement component, provide HP with identification information for each data retentive component retained hereunder, and, upon HP request, execute a document provided by HP acknowledging the retention of the data retentive component
- Destroy the retained data retentive component and/or ensure that is not put into use again
- Dispose of all retained data retentive components in compliance with applicable environmental laws and regulations

For data retentive components supplied by HP to the Customer as loaner, rental, or lease products, the Customer will promptly return the replacement components at the expiration or termination of support with HP. The Customer will be solely responsible for removing all sensitive data before returning any such loaned, rented, or leased components or products to HP, and HP shall not be responsible for maintaining the confidentiality or privacy of any sensitive data that remains on such components.

Handwritten signature on the right side of the page.

ВЯРНО С  
ОРИГИНАЛА

Handwritten signature at the bottom right corner.

Handwritten signature at the bottom left corner.

## Coverage

This service provides coverage for eligible HP- or Compaq-branded hardware products and HP-supported and -supplied internal components such as memory and DVD-ROM drives, as well as attached HP- or Compaq-branded accessories purchased together with the main product, such as mouse, keyboard, docking station, AC power adapter, and external monitor up to 22 inches or less in size.

Coverage for eligible multivendor systems includes all standard vendor-supplied internal components and the external monitor, keyboard, and mouse.

For replacement parts and components that are discontinued, an upgrade path may be required. Upgrades for discontinued parts or components may in some cases result in additional charges to the Customer. HP will work with the Customer to recommend a replacement. Not all components will have available replacements in all countries due to local support capabilities.

Consumable items including, but not limited to, removable media, customer-replaceable batteries, maintenance kits, and other supplies, as well as user maintenance, are not covered by this service.

For some servers, networking and storage products, CPUs, disks, options, and other major internal and external components will be covered if support has been configured accordingly and they are listed in the contract's equipment list under the hardware support section (if applicable).

For HP ProLiant servers, networking and storage systems, the service on the main product covers HP-branded hardware options not designated by HP as requiring separate coverage that are qualified for the server, are purchased at the same time or afterward, and are internal to the enclosure. The service also covers HP-supported and -supplied external monitors up to 22 inches in size and tower UPS products. These items will be covered at the same service level as the main product.

For HP ProLiant servers, storage or HP BladeSystem enclosures installed within a rack, the service also covers all HP qualified rack options not designated by HP as requiring separate coverage. Coverage includes HP-supported and -supplied UPS products not exceeding 12 kVA, KVM switch, console, and PDU, installed within the same rack. The UPS battery is covered separately under its own warranty terms and conditions, and is limited to the terms of the applicable warranty period.

For HP BladeSystem enclosures, the service covers the enclosure, power supplies, fans, enclosure devices, and options not designated by HP as requiring separate coverage.

For HP Moonshot systems, the service covers the chassis, power supplies, fans, chassis devices, and servers not designated by HP as requiring separate coverage.

Notwithstanding anything in this document, service purchased on the main product does not extend to all options or all Moonshot servers. Service coverage for certain options or Moonshot servers must be configured and purchased separately; otherwise, standard warranty terms apply. For a complete list of the HP ProLiant and HP BladeSystem options and Moonshot servers that require separate service coverage, please visit [www.hp.com/go/excludedoptions](http://www.hp.com/go/excludedoptions).

ВЯРНО С  
ОРИГИНАЛА

## General provisions/Other exclusions

Distribution of certain third-party software updates, license agreements, and license keys may be made directly from the third-party vendor to the Customer, as applicable.

When this service is provided for a solution that is composed of multiple HP and/or third-party products, software support will be offered only on updates that are made available for the solution by HP. HP will acknowledge a call by logging a case, communicating the case ID to the Customer, and confirming the Customer's incident severity and time requirements for the start of remedial action. Note: For events received via HP electronic remote support solutions, HP is required to contact the Customer, determine the incident severity with the Customer, and arrange access to the system before the hardware call-to-repair time or hardware onsite response time period can start.

Onsite hardware support response times and call-to-repair times, as well as software support remote response times, may differ depending on incident severity. The Customer determines the incident severity level.

Incident severity levels are defined as follows:

- Severity 1—Critical Down: for example, the production environment is down; a production system or production application is down or at severe risk; data corruption, loss, or risk has occurred; business is severely affected; there are safety issues
- Severity 2—Critically Degraded: for example, the production environment is severely impaired; a production system or production application has been interrupted or compromised; there is risk of reoccurrence; there is significant impact on business
- Severity 3—Normal: for example, a non-production system (e.g., test system) is down or degraded; a production system or production application has been degraded with a workaround in place; non-critical functionality has been lost; there is limited impact on the business
- Severity 4—Low: there is no business or user impact

## Ordering information

For products containing individually sold and supported units or options, all individually sold and supported units or options must be on contract and at the same service level as the base product if that service level is available on those units or options.

Software support must be purchased for each system, processor, processor core, or end user in the Customer's environment that will require support.

Availability of service features and service levels may vary according to local resources and may be restricted to eligible products and geographic locations.

To order the service with the comprehensive defective material retention service feature, the defective media retention service feature must also be ordered.

ВЕРНО С  
ОРИГИНАЛА

*Handwritten mark*

*Handwritten mark*

To obtain further information or to order HP Foundation Care Service, contact a local HP sales representative and reference the following product numbers (x denotes the service length in years; options are 1, 3, 4, or 5 years, or "C" for contractual services).

- HP Foundation Care NBD Service (H7J32Ax)
- HP Foundation Care NBD w DMR Service (H7J33Ax)
- HP Foundation Care 24x7 Service (H7J34Ax)
- HP Foundation Care 24x7 w DMR SVC (H7J35Ax)
- HP Foundation Care CTR Service (H7J36Ax)
- HP Foundation Care CTR w DMR Service (H7J37Ax)

CDMR can be selected as a configurable option within the DMR service levels.

Depending on the point of purchase and the requested service-level option, other product numbers may apply. Please consult a local HP representative or HP reseller regarding which product number will best meet your specific needs.

### For more information

For more information on HP Foundation Care Service or other HP support services, contact any of our worldwide sales offices or visit the following websites:

HP support services: [www.hp.com/services/support](http://www.hp.com/services/support)

HP Care Pack services: [www.hp.com/services/carepack](http://www.hp.com/services/carepack)

*Handwritten mark*

Sign up for updates  
[hp.com/go/getupdated](http://hp.com/go/getupdated)



Share with colleagues



Rate this document

© Copyright 2013 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty or condition, express or implied, in fact or in law. HP shall not be liable for technical or editorial errors or omissions contained herein.

HP Technology Services are governed by the applicable HP terms and conditions of service provided or indicated to Customer at the time of purchase.

4AA4-B876EEE, Created October 2013

*Handwritten signature*

ВЯРНО С  
ОРИГИНАЛА



300143

Превод от английски език

Хюлет-Пакард

## ДЕКЛАРАЦИЯ за СЪОТВЕТСТВИЕ

съгласно ISO/IEC 17050-1 и EN 17050-1

Декларация за съответствие № #: TPS-W001-R8

Име на доставчика:

Хюлет-Пакард Кампъни

Адрес на доставчика:

11445 Компак Сентър Драйв Уест,  
Хюстън, Тексас 77070, САЩ

декларира, че продуктът:

Име и модел на продукта:

HP ProLiant ML310e Gen8 server, HP ProLiant ML310e Gen8 v2,  
HP ProLiant ML10 v2; HP StoreEasy 1530; HP StoreEasy 1540

Регулативен номер на модел: <sup>1)</sup>

TPS-W001

Продуктови опции:

Всички

### Съответства на следните Продуктови спецификации и разпоредби:

#### Електромагнитна съвместимост:

CISPR 22:2008 Клас Б  
EN 55022:2010 Клас Б  
EN 55024:2010  
EN 61000-3-2:2006 +A1:2009 +A2:2009  
EN 61000-3-3:2008  
FCC CFR 47 Част 15 Клас Б  
ICES-003:2004 Клас Б

#### Безопасност:

EN 60950-1:2006 +A11:2009+A1:2010+A12:2011  
IEC 60950-1:2005+A1:2009  
EN 62479:2010  
UL60950-1,  
CSA C22.2 No. 60950-1-07, 2-ро издание

Директива за ограничаване  
използването на някои опасни  
субстанции в електрическите и  
електронни изделия(RoHS):

EN 50581:2012

#### Консумация на енергия:

Регулация (ЕС) No. 1275/2008

Регулация (ЕС): No. 617/2013

Генерализиран протокол за изпитване за изчисляване на енергийната ефективност на вътрешния

AC-DC и DC-DC Power Supply Revision 6.6 (Април 2012)

Този продукт отговаря на изискванията на Директива за ниско напрежение 2006/95/ЕС, Директива за електромагнитна съвместимост 2004/108/ЕС, Директива за ограничаване използването на някои опасни субстанции в електрическите и електронни изделия 2011/65/EU, Директива за екологичен дизайн 2009/125/ЕС и носи съответната „СЕ” маркировка.

Това устройство отговаря на изискванията на Част 15 от правилата на FCC (Федерална комуникационна комисия). Действието е обект на следните две условия : (1) това устройство не може да причини вредно

**ВЯРНО С  
ОРИГИНАЛА**

000148

смушение и (2) устройството трябва да поеме всяко получено смушение, включително и такова, което може да причини нежелано действие.

**Допълнителна информация:**

- 1) На продукта е присвоен Регулативен номер на модел, който се придържа към регулативните аспекти на дизайна. Регулативният номер на модела е основният продуктов идентификатор в регулативната документация и докладите от изпитване; този номер не бива да се бърка с пазарното наименование или продуктите номера.



28 февруари 2015 г.

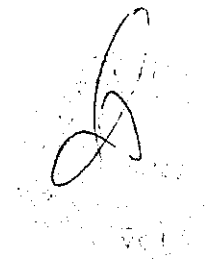
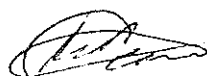
/подпис/  
Джо Шарки, Управител  
Център за продуктово съответствие, Хюстън

**Местен контакт само за регулативни въпроси:**

ЕС: Хюлет-Пакард ГмбХ, HQ-TRE, Херенбергер Щрасе 140, 71034 Бьоблинген, Германия,  
САЩ: Хюлет-Пакард, 3000 Хановер Стрийт, Пало Алто 94304, САЩ, 650-857-1501

[www.hp.eu/certificates](http://www.hp.eu/certificates)

**ВЯРНО С  
ОРИГИНАЛА**





**DECLARATION OF CONFORMITY**  
according to ISO/IEC 17050-1 and EN 17050-1

**DoC #: TPS-W001-R8**

**Supplier's Name:** Hewlett-Packard Company  
**Supplier's Address:** 11445 Compaq Center Drive West, Houston, TX 77070, USA

**declares, that the product**

**Product Name and Model:** HP ProLiant ML310e Gen8 server, HP ProLiant ML310e Gen8 v2, HP ProLiant ML10 v2; HP StoreEasy 1530; HP StoreEasy 1540

**Regulatory Model Number:** <sup>1)</sup> TPS-W001

**Product Options:** All

**conforms to the following Product Specifications and Regulations:**

**EMC:**

- CISPR 22:2008 Class B
- EN 55022:2010 Class B
- EN 55024:2010
- EN 61000-3-2:2006 +A1:2009 +A2:2009
- EN 61000-3-3:2008
- FCC CFR 47 Part 15 Class B
- ICES-003:2004 Class B

**Safety:**

- EN 60950-1:2006 +A11:2009+A1:2010+A12:2011
- IEC 60950-1:2005+A1:2009
- EN 62479:2010
- UL60950-1, 2nd Edition
- CSA C22.2 No. 60950-1-07, 2nd Edition

**RoHS:**

- EN 50581:2012

**Energy Use:**

- Regulation (EC) No. 1275/2008
- Regulation (EC): No. 617/2013  
Generalized Test Protocol for Calculating the Energy Efficiency of Internal AC-DC and DC-DC Power Supply Revision 6.6 (April 2012)

The product herewith complies with the requirements of the Low Voltage Directive 2006/95/EC, the EMC Directive 2004/108/EC, the RoHS Directive 2011/65/EU, the Ecodesign Directive 2009/125/EC and carries the **CE** marking accordingly.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Additional Information:**

- 1) This product is assigned a Regulatory Model Number which stays with the regulatory aspects of the design. The Regulatory Model Number is the main product identifier in the regulatory documentation and test reports, this number should not be confused with the marketing name or the product numbers.

Feb 28, 2015

Joe Sharkey, Manager  
Houston Product Compliance Center

**Local contact for regulatory topics only:**

EU: Hewlett-Packard GmbH, HQ-TRE, Herrenberger Strasse 140, 71034 Boeblingen, Germany

**ВЯРНО С  
ОРИГИНАЛА**

000148



*[Handwritten signature]*

# DECLARATION OF CONFORMITY

according to ISO/IEC 17050-1 and EN 17050-1

U.S.: Hewlett-Packard, 3000 Hanover St., Palo Alto, CA 94304, U.S.A. 650-857-1501

[www.hp.eu/certificates](http://www.hp.eu/certificates)

*[Handwritten mark]*

*[Handwritten mark]*

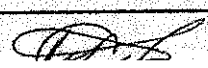
*[Handwritten signature]*

**ВЯРНО С  
ОРИГИНАЛА**

*[Handwritten signature]*

800149

1.3 ПРИЛОЖЕНИЕ 2: УСЛОВИЯ НА ГАРАНЦИОННОТО (СЕРВИЗНО) ОБСЛУЖВАНЕ И ПОДРОБНО ОПИСАНИЕ НА ОРГАНИЗАЦИЯТА НА СЕРВИЗА И ПРОЦЕДУРИТЕ ПО ИЗПЪЛНЕНИЕ НА ЗАЯВКИТЕ ЗА РЕМОНТ





## ПРИЛОЖЕНИЕ 2

### Условия на гаранционното (сервизно) обслужване и подробно описание на организацията на сервиза и процедурите по изпълнение на заявките за ремонт

САПИЕНТ ЕООД ще извършва техническа поддръжка на техниката, собственост на Възложителя. Техническото обслужване и ремонтът ще се извършват след получаване на заявка от Възложителя, съгласно изискванията, установени от производителя.

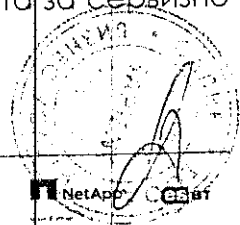
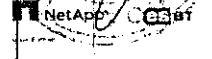
Представител на Възложителя подава заявка за сервизна услуга като съобщава серийния номер на повреденото оборудване и идентифицираните последствия от повредата. Изпълнителят потвърждава приемането на ЗСУ и предоставя номера, под който е регистрирана заявката.

Ремонтът се извършва с оригинални резервни части от склад. Протокол за извършена сервизна услуга /ПСУ/ изготвя сервизният специалист, на когото е възложено изпълнението на ЗСУ. В протокола се описва как е решен проблемът, какви модули са подменени и в какви срокове е станало това. На хартиен носител в два екземпляра се подписват и двете.

Обслужването ще се извършва в сградите на Възложителя. При невъзможност за ремонтране на повредената техника на място, САПИЕНТ ЕООД я приема за поправка в осигурен от него сервиз със съгласие на Възложителя и подписване на приема-предавателен протокол. В този случай транспортните разходи са за сметка на Изпълнителя.

Поддръжка от страна на САПИЕНТ ЕООД включва следните дейности:

- Приемане и регистриране на съобщение за повреда;
- Назначаване на приоритет на изпълнение на съответното повикване, в случай че са постъпили едновременно няколко заявки за ремонт;
- Поддържане в пълна техническа и функционална изправност приетата за сервизно обслужване техника;
- Консултации по телефона;



Handwritten signature at the bottom center of the page.

000151

- Посещение на място;
- Първоначален оглед и опис текущото състояние на техниката;
- Попълване на сервизна карта;
- Диагностика на повреденото устройство;
- Ремонт/възстановяване работоспособността на устройството;
- Тестване на технически устройства за работоспособност;
- Поддържане на картотека от сервизни карти;
- Предоставяне на указания и инструкции за правилната експлоатация на техниката;
- Замяна на дефектирали компоненти, като вложените изправни части става собственост на Възложителя при влягането им.

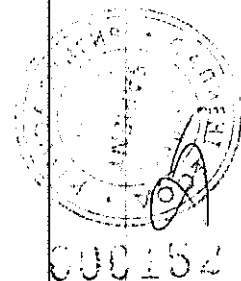
### Схема на сервизните процеси

В случай, че САПИЕНТ ЕООД бъде избран за изпълнител, то дружеството ще използва ресурса на фирма СТЕМО ООД ( видно от декларация приложена в ПЛИК 1 ), а именно Help-Desk системата, както и процеси и политики за управление на услуги съгласно препоръките на ISO 20 000-1 и най добрите практики от ITIL.

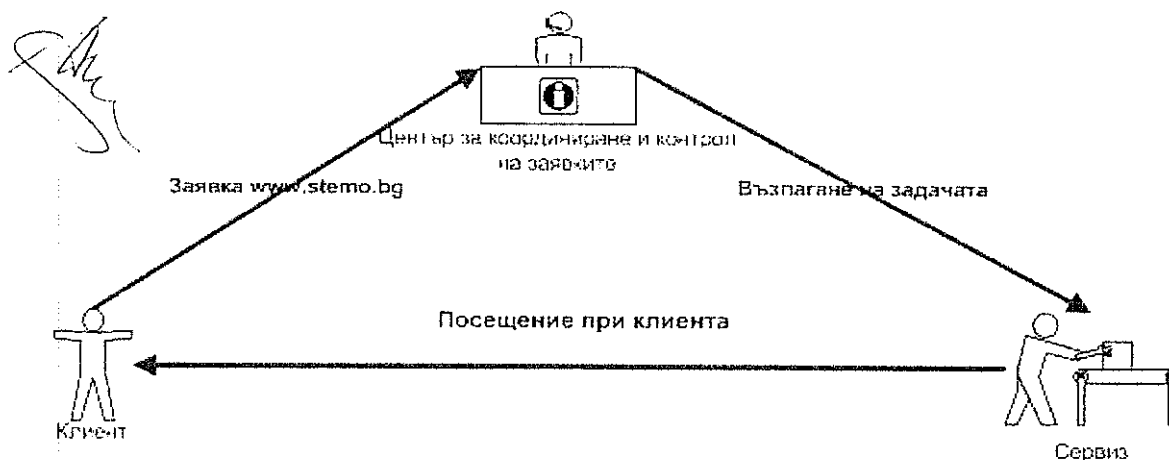
1.Ред за заявяване, обработване и приключване на инциденти по договори за сервизна поддръжка. Web система – достъп, заявки и справки

**Подаване на заявки за инцидент.** В работно време услугата е достъпна през web системата, на националния телефон или имейл, а в извънработно време - на националния телефон.

Работно време	Заявка за инцидент по договор за обслужване	
	8:30 до 18:00	от 18:01 до 8:59
24 часа x 7 дни	web заявка, или диспечер на тел.070017978	диспечер на тел.070017978
13 часа x 5 дни	web заявка, или диспечер на тел.070017978	диспечер на тел.070017978
8 часа x 5 дни	web заявка, или диспечер на тел.070017978	няма

## Обработване и приключване на инциденти



Клиентът регистрира заявка за инцидент. Заявката може да бъде регистрирана по някои от описаните по-горе начини. В работно време, предпочитания ред за регистриране е web-заявката, а в извънработно време единствения начин е националният телефон.

Заявката за инцидент се получава в центъра за координиране и контрол. Съобразено с договореното ниво на поддръжка, на инцидента се назначава приоритет и се възлага за изпълнение към съответния сервиз, назначава се сервизен инженер – изпълнител.

Клиентът получава обратна информация за датата и часа на посещение.

Независимо от формата, по която е получена заявката, информацията, която получава клиентът при потвърждаване на приемането на заявката за инцидент е в следния формат:

Номер на заявката	Попълва се номерът на СП от Диригент
Име на инженера	Определен от ръководителя на сервиза
Телефон за връзка	От данните за инженера
Дата и час на посещение	Определени от ръководителя на сервиза според SLA на клиента.
Забележка	Пояснение в свободен текст.

През целия процес - от регистрирането на заявката до възстановяването на работоспособността на устройството, центърът за координиране и контрол следи за


спазване на договорените ангажименти. След като сервизният инженер приключи с работата при клиента, незабавно уведомява координатора за извършените дейности.


Клиентът получава информация за отработване на заявката в следния формат:

Номер на заявката		Попълва се номера на СП от Диригент
Дейности		Описват се предприетите действия за решаване на проблема
Резултат		Описва се състоянието на техниката, след намесата на сервизен инженер
Оборотна техника		Описание на обратната техника
Модел:		
SN:		
Отработени часове		Отразява се изразходеното време
Очаквана дата на завършване		
Забележка		Пояснение в свободен текст

Ако посещението на сервизният инженер не е довело до окончателно решение на проблема, т.е. има предоставена обратна техника или се чака потвърждение на оферта, информация за това се изпраща допълнително към клиента.

Формат на информацията за приключване на инцидент:

Номер на заявката		Попълва се номера на СП от Диригент
Дейности		Описват се предприетите действия за решаване на проблема
Резултат		Описва се състоянието на техниката, след намесата на сервизен инженер
Отработени часове		Отразява се изразходеното време
Оферта номер		

  
000150

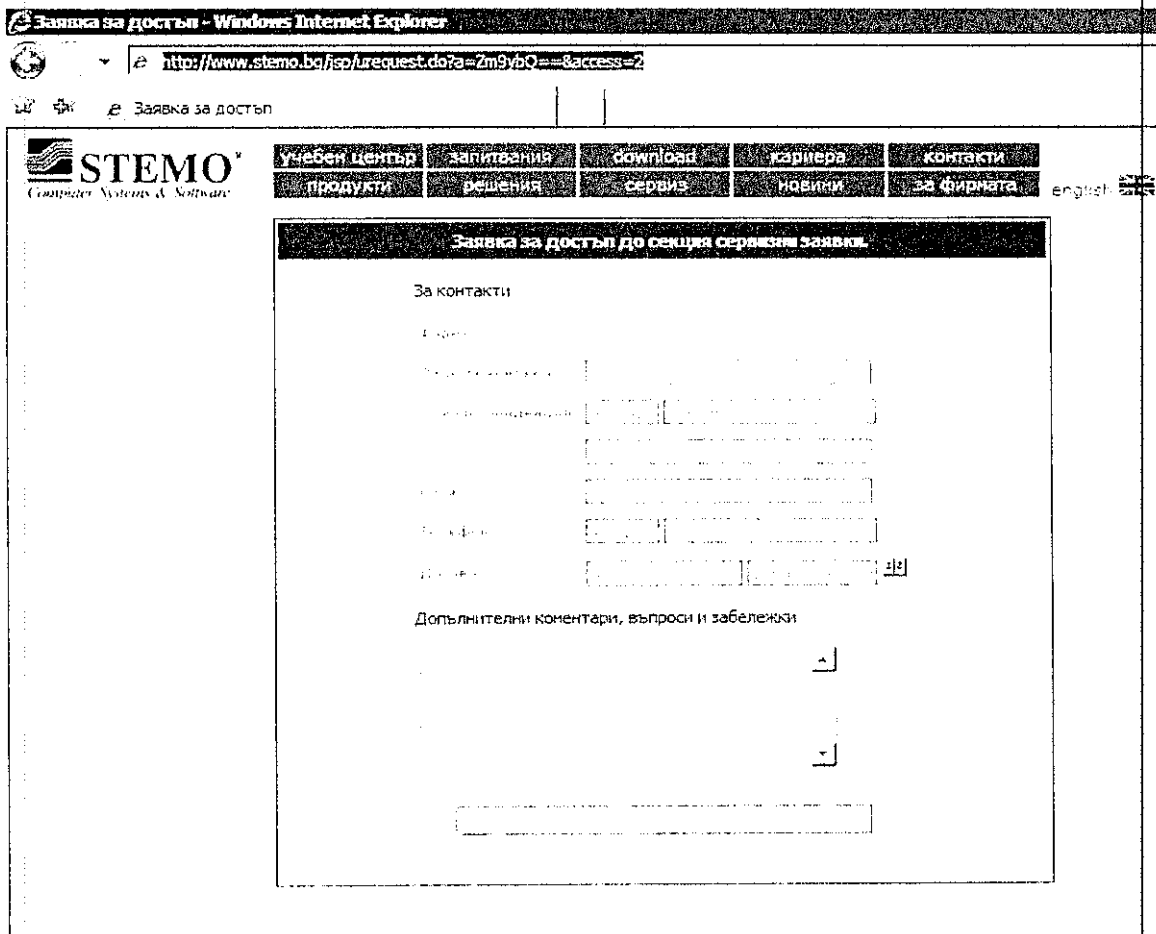
Забележка

Пояснение в свободен текст

**Web система за регистриране на заявки за инциденти.**

Достъпът до системата се осъществява с помощта на стандартен web-браузер – например Microsoft Internet Explorer. Необходимо е потребителско име и парола за идентификация, което се получава след попълване на форма на адрес:

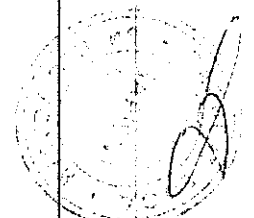
<http://www.stemo.bg/jsp/urequest.do?a=Zm9ybQ==&access=2>



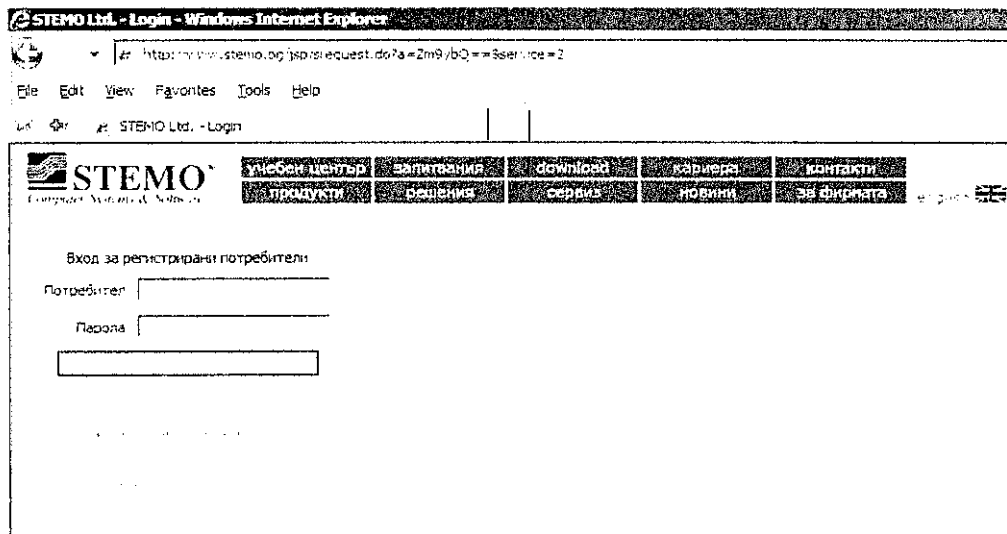
Заявлението за достъп се обработва от Координатора на услугата. Събира се и се въвежда цялата информация за структурата на обектите на клиента, настройват се контролните точки за обратна връзка, необходими за активиране на процедурата. Клиентът получава необходимия брой потребителски имена и пароли за достъп.

Вход и идентифициране пред системата.

Вход: <http://www.stemo.bg/jsp/srequest.do?a=Zm9ybQ==&service=2>

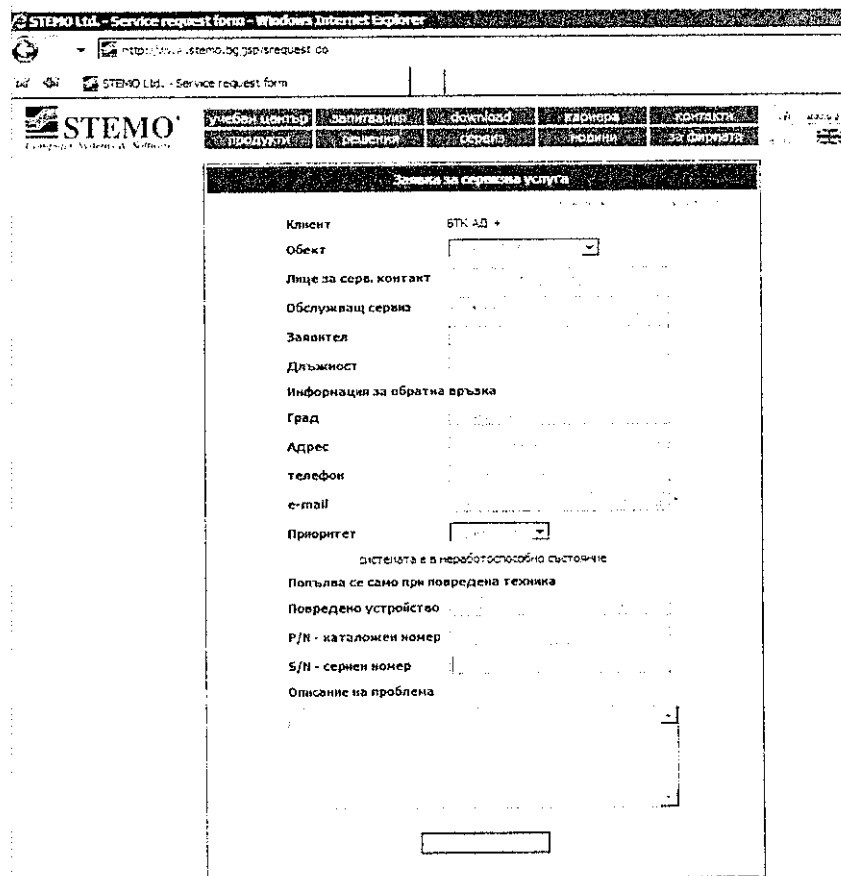


000:55



С получените потребителско име и парола, потребителят се идентифицира пред системата. При проблем с потребителско име или парола, пишете на имейл [support@stemo.bg](mailto:support@stemo.bg)

Попълване на заявка за сервизна услуга.



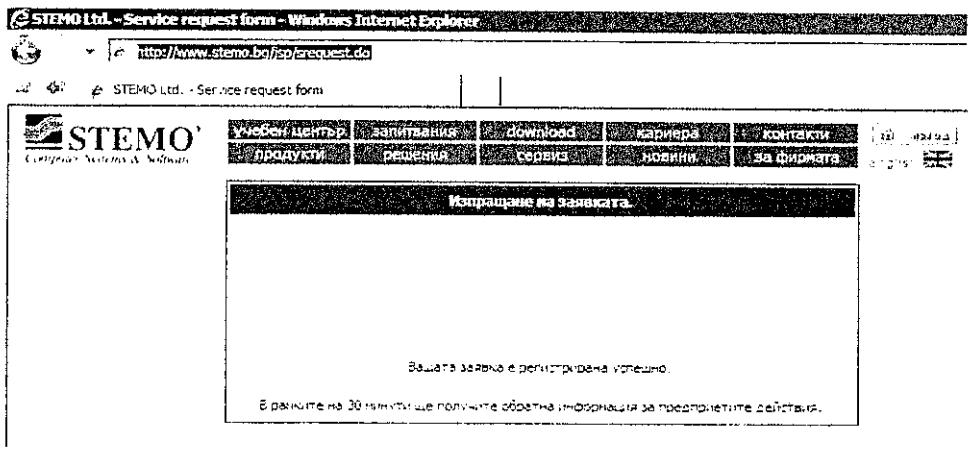
При попълване на формата, от падащото меню се избира съответният обект на Клиента, предварително въведен в системата. Попълват се всички задължителни полета с вярна информация, ако не са заредени автоматично.

000150



Попълва се информация за приоритета на заявката, както и данни за повредения продукт с описание на проблема.

Следва екран за потвърждение на въведената информация и потвърждение, че заявката за инцидент е регистрирана в системата.



Клиентът получава обратна информация по имейл за името на сервизния инженер, който ще го посети, както и очакваната дата и час на посещение.

От този момент, отстраняването на проблема е ангажимент на сервиза на Стемо!

Системата дава възможност за преглед на състоянието на списък с приетите заявки за инциденти на адрес:

<http://www.stemo.bg/jsp/secured.do?a=c2xpc3Q=&service=1>

*Handwritten signature*

STEMO LTD - Service orders list - Windows Internet Explorer  
http://www.stemo.bg/secure/door.asp?ID=8&order=1  
STEMO Ltd. - Service orders list

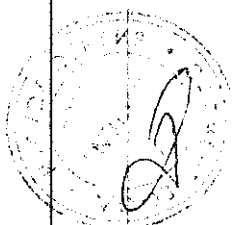
Клиент	Поръчка	Дата	Тип	Сервизна база	Продукт
БТК АД ПЛЕВЕН	0093060021501	21.12.2006	Гаранционна		Монитор - PSC SCALEVIEW L19-1W
БТК АД	0033060024939	09.01.2007	Гаранционна		Преносен компютър - HP Compaq nx8220 P-41 750 (1.86
БТК АД	0033060024780	05.01.2007	Гаранционна		Преносен компютър - HP Compaq nx8220 P-M 750 (1.86
БТК АД	0033060024714	01.01.2007	Гаранционна		Настолен компютър - SCENIC E620, @15G Celeron D 33 Creative SB Live 24-BIT
БТК АД	0033060024708	03.01.2007	Гаранционна		Настолен компютър - PSC ESPRIMO E5700 @15Gv, Cele
БТК АД	0033060024707	03.01.2007	Гаранционна		Настолен компютър - PSC ESPRIMO E5700 @15Gv, Cele
БТК АД	0033060024704	03.01.2007	Гаранционна		Настолен компютър - PSC ESPRIMO E5700 @15Gv, Cele
БТК АД	0033060024691	03.01.2007	Гаранционна		Настолен компютър - PSC ESPRIMO E5700 @15Gv, Cele
БТК АД	0033060024652	28.12.2006	Гаранционна		Преносен компютър - HP Compaq nx8000 P-M 1.7GHz 1
БТК АД	0033060024462	19.12.2006	Гаранционна		Настолен компютър - PSC ESPRIMO E5905 @45G, Celer
БТК АД	0073060002004	11.01.2007	Гаранционна		Настолен компютър - Entry Level PC - HP dx2200 Busin
БТК АД	0083060004232	04.01.2007	Гаранционна		Настолен компютър - PSC ESPRIMO E5700 @15Gv, Cele
БТК АД	0083060004231	04.01.2007	Гаранционна		Настолен компютър - PSC ESPRIMO E5700 @15Gv, Cele
БТК АД	0033060024799	04.01.2007	Гаранционна		Настолен компютър - SCENIC E300, @65Gv Intel Celer
БТК АД	0093060001566	18.01.2007	Гаранционна		Настолен компютър - SCENIC E300, @65Gv Intel Celer
БТК АД	0093060001536	05.01.2007	Абон. дог. с платени частни		Цифрова копирна машина - Canon iR 2230
БТК АД	0093060001520	04.01.2007	Гаранционна		Настолен компютър - PSC ESPRIMO E5700 @15Gv, Cele
БТК АД	0093060001507	28.12.2006	Гаранционна		Настолен компютър - SCENIC E300, @65Gv Intel Celer
БТК АД +	0033060025418	24.01.2007	Гаранционна		Преносен компютър - HP Compaq nx8220 P-41 750 (1.86
БТК АД +	0033060025208	17.01.2007	Гаранционна		Монитор - HP Flat Panel Monitor L1702 ZTone TC099, HF

страница: 1

*Handwritten signature*

1. Схема на действие при посещение на място. Документиране на дейността.  
Бланка на сервизна поръчка за ремонт.

*Handwritten signature*

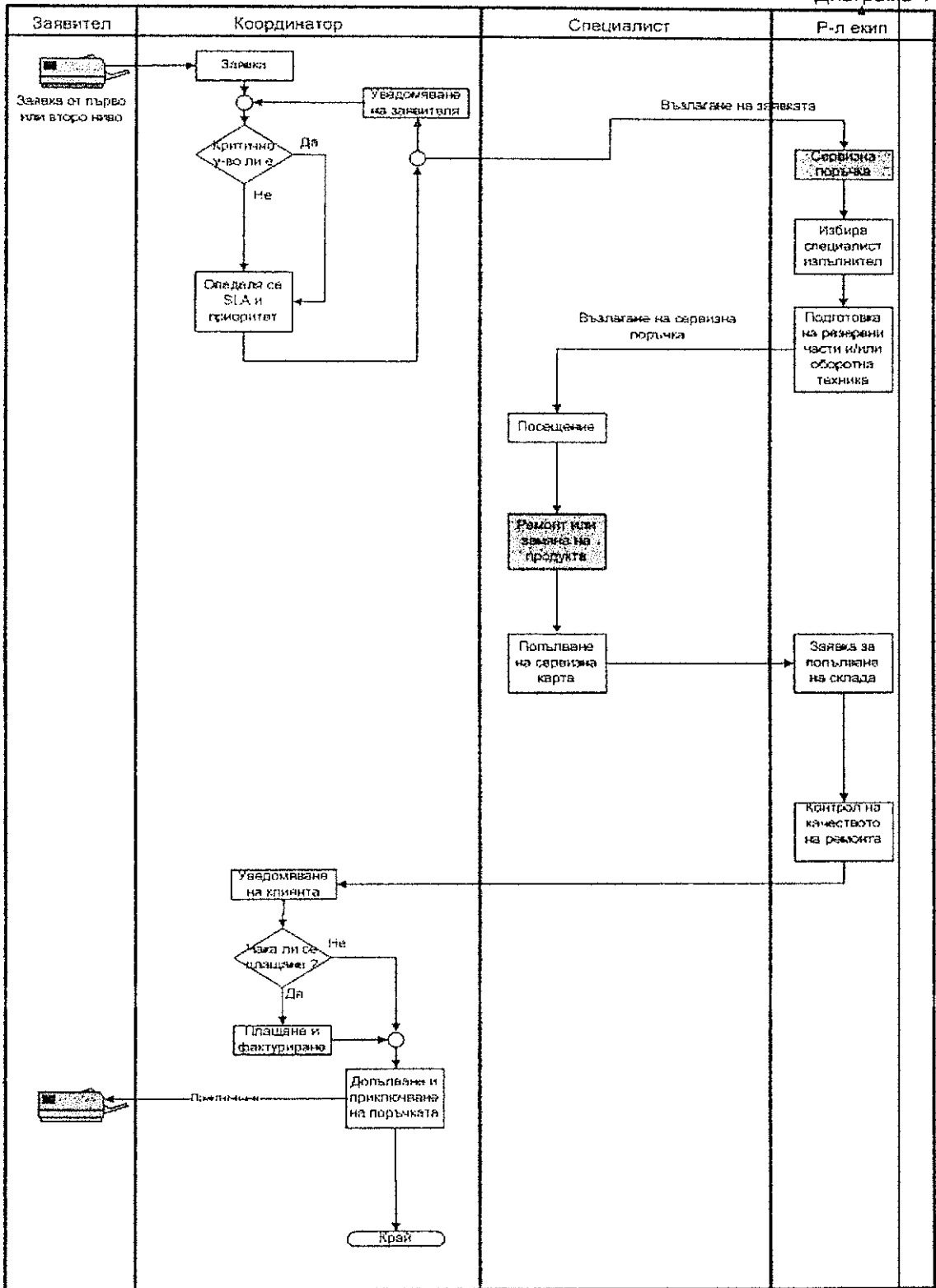


000150

*[Handwritten signature]*

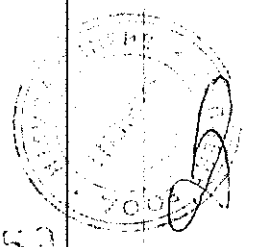
*[Handwritten signature]*

Диаграма 1



*[Handwritten signature]*

000150



*[Handwritten signature]*

СЕРВИЗНА ПОРЪЧКА ЗА РЕМОНТ

QM\_F007\_003

Номер на поръчката	DC33060035E1C	
Дата на поръчката	23.12.2007	
Тип	ПЪРВА	
Състояние на поръчката	<input checked="" type="checkbox"/> ПЪРВА <input type="checkbox"/> В ПРОЦЕС НА РЕМОНТ <input type="checkbox"/> ЗАВЪРШЕНА <input type="checkbox"/> ОТКАЗАНА	
Клас на поръчката	НЗСМ	
Имя на клиента		
Адрес на клиента		
Телефон на клиента		
Имя на представителя		
Представител на клиента		
Имя на представителя	Ема Тодорова	
Телефон на представителя		

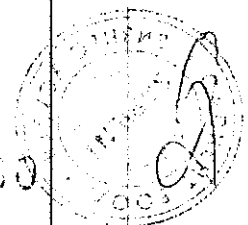
Съгласно с условията на гаранцията, предоставяна от производителя на оборудването, прилаганите в настоящата поръчка услуги са безплатни. При необходимост от допълнителни услуги, които не са обхванати от гаранцията, клиентът е длъжен да заплати разходите за тези услуги. При необходимост от допълнителни услуги, които не са обхванати от гаранцията, клиентът е длъжен да заплати разходите за тези услуги.

Съгласно с условията на гаранцията, предоставяна от производителя на оборудването, прилаганите в настоящата поръчка услуги са безплатни. При необходимост от допълнителни услуги, които не са обхванати от гаранцията, клиентът е длъжен да заплати разходите за тези услуги.

Поръчката е обработена и резултатът е: **УСПЕШНО**. При необходимост от допълнителни услуги, които не са обхванати от гаранцията, клиентът е длъжен да заплати разходите за тези услуги.

*[Handwritten signature]*

000160



СЕРВИЗНА КАРТА

QM\_F005\_032

Модел	H30K
Идентификационен номер	0052080036510 от 03.10.2007
Честота на работата	платена
Продължителност на работата	-
Местоположение на работата	
Имя на клиента	
Имя на адресанта	

Вложени рез. части, материали, външни услуги и транспорт

Имя на частта/материала	Идентификационен номер	Единица на мяр.	Код на частта/материала	Кол-во	Цена на частта/материала (лв.)	Сума (лв.)
---	---	---	---	1.00	0.00	0.00
					Общо рез. части:	0.00

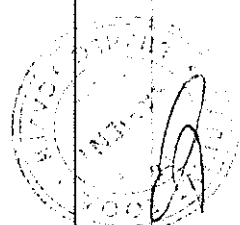
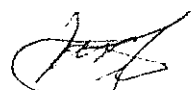
Извършени услуги от сервиза на STEMO

Имя на услугата	Идентификационен номер	Единица на мяр.	Код на услугата	Кол-во	Цена на услугата (лв.)	Сума (лв.)
---	---	---	---	1.00	0.00	0.00
					Общо услуги:	0.00
					Всичко:	0.00

Всички цени са в лева с включен ДДС.

Допълнителни услуги:		
Транспорт:		

Настоящата Сервизна Карта е издадена в съответствие с условията на Сервизния Договор, сключен между Клиента и STEMO. Сервизната Карта е валидна само в комбинация с Сервизния Договор. STEMO не носи отговорност за повреда на данни, които могат да бъдат изгубени, повредени или унищожени в резултат на използването на оборудването. STEMO не носи отговорност за повреда на оборудването, причинена от неправилно използване, неправилна инсталтация, неправилно поддръжка или неправилно обслужване. STEMO не носи отговорност за повреда на оборудването, причинена от естествени бедствия, пожар, кражба или други обстоятелства извън контрола на STEMO. STEMO не носи отговорност за повреда на оборудването, причинена от използването на неоригинални части и материали. STEMO не носи отговорност за повреда на оборудването, причинена от използването на оборудването за цели, различни от предназначенията, за които е предназначено. STEMO не носи отговорност за повреда на оборудването, причинена от използването на оборудването в екстремни условия. STEMO не носи отговорност за повреда на оборудването, причинена от използването на оборудването в опасни условия. STEMO не носи отговорност за повреда на оборудването, причинена от използването на оборудването в неустойчиви условия. STEMO не носи отговорност за повреда на оборудването, причинена от използването на оборудването в условията на екстремни температури, висока влажност или висока скорост на вятър. STEMO не носи отговорност за повреда на оборудването, причинена от използването на оборудването в условията на екстремни вибрации. STEMO не носи отговорност за повреда на оборудването, причинена от използването на оборудването в условията на екстремни ударни сили. STEMO не носи отговорност за повреда на оборудването, причинена от използването на оборудването в условията на екстремни електромагнитни полета. STEMO не носи отговорност за повреда на оборудването, причинена от използването на оборудването в условията на екстремни електромагнитни смущения. STEMO не носи отговорност за повреда на оборудването, причинена от използването на оборудването в условията на екстремни електромагнитни излъчвания. STEMO не носи отговорност за повреда на оборудването, причинена от използването на оборудването в условията на екстремни електромагнитни вълни. STEMO не носи отговорност за повреда на оборудването, причинена от използването на оборудването в условията на екстремни електромагнитни радиации. STEMO не носи отговорност за повреда на оборудването, причинена от използването на оборудването в условията на екстремни електромагнитни излъчвания. STEMO не носи отговорност за повреда на оборудването, причинена от използването на оборудването в условията на екстремни електромагнитни излъчвания. STEMO не носи отговорност за повреда на оборудването, причинена от използването на оборудването в условията на екстремни електромагнитни излъчвания.

000101

За всяка извършена дейност по следгаранционното сервизно обслужване специалистите на изпълнителя попълват и подписват документ – Сервизна поръчка и сервизна карта, ясно показващ типа на направените ремонти; заменените части настройки и др.

Списък на всички резервни части с консумативен характер

Партиден номер	Наименование на резервната част с консумативен характер	Ресурс в бр. копия
	<b>HP LaserJet Enterprise MFP M630dn</b>	
CF281A	HP 81A Black Original LaserJet Toner Cartridge	10 500
CF281X	HP 81X High Yield Black Original LaserJet Toner Cartridge	25 000
L2725A	ADF maintenance kit	100 000
B3M78-67903	Fuser 220V Service Kit((includes the fuser, transfer roller, and the Tray 2 - Tray 5 feed and separation rollers)	225 000
	<b>HP LaserJet Enterprise MFP M725dn</b>	
CF214A	HP 14A Black LaserJet Toner Cartridge	10 000
CF214X	HP 14X Black LaserJet Toner Cartridge	17500
L2725	ADF roller replacement kit	100 000
CF254A	Maintenance Kit - For 220 VAC operation - Includes 220 VAC fuser assembly, transfer roller, tray 1 paper pick-up roller and separation pad, tray 2 or 3 separation pad, and tray 4, 5 and 6 feed and separation roller	200 000
	<b>HP Officejet Pro X555dn Printer</b>	
D8J07A	HP 980 Cyan Original Ink Cartridge	6600

D8J09A	HP 980 Yellow Original Ink Cartridge	6600
D8J08A	HP 980 Magenta Original Ink Cartridge	6600
D8J10A	HP 980 Black Original Ink Cartridge	10 000

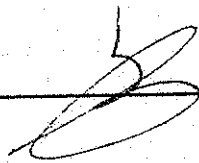
Дата: 28.08.2015 г.

ПОДПИС и ПЕЧАТ: .....

/Даниела Христова –  
Пълномощник на Управителя на САПИЕНТ БООД/

*[Handwritten signature]*

60010



ЦЕНОВО ПРЕДЛОЖЕНИЕ - ПО ОБРАЗЕЦ № 2





До  
Ръководителя на УО на ОПРР  
София, ул. „Св. Св. Кирил и Методий“ № 17-19

САПИЕНТ ЕООД, регистрирано в Търговски регистър на 08.06.2010 г., представлявано от Даниела Иванова Христова в качеството си на Пълномощник на Управителя на САПИЕНТ ЕООД, с БУЛСТАТ/ЕИК: 201171593, с регистрация по ЗДАС ВГ201171593 от 25.06.2010 г. със седалище и адрес на управление: гр. Габрово 5300, ул. „Николаевска“ 48, адрес за кореспонденция: гр. София 1407, бул. „Черни връх“ 51Б, телефон за контакт: +359 2 816 2300, факс: +359 2 816 2303, електронна поща: [office@sapient.bg](mailto:office@sapient.bg) банкова сметка: IBAN: BG67UNCN70001519730068 (BIC: UNCRBGSF, банка: Уникредит Булбанк, титуляр на сметката: САПИЕНТ ЕООД)

**Ц Е Н О В А   О Ф Е Р Т А**  
**(ПРЕДЛАГАНА ЦЕНА)**

за участие в открита процедура за възлагане на обществена поръчка с предмет: „Доставка на ИТ оборудване, необходимо за работата на Управляващия орган на Оперативна програма „Регионално развитие 2007-2013 г.“

1000000



Даниела Христова  
Габрово

**УВАЖАЕМИ ДАМИ И ГОСПОДА,**

След проучване и запознаване с документацията за участие в откритата процедура за възлагане на настоящата обществена поръчка, предлагаме да изпълним доставката, инсталирането и въвеждането в експлоатация при следните финансови условия:

**I. ФИНАНСОВИ УСЛОВИЯ**

Настоящото предложение включва следното:

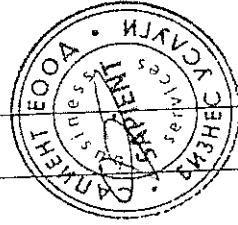
**1. Цена за изпълнение на поръчката:**

Цена на доставеното оборудване - **57 383,60** (петдесет и седем хиляди триста осемдесет и три лева и шестдесет стотинки) лв. без ДДС или **68 860,32** (шестдесет и осем хиляди осемстотин и шестдесет лева и тридесет и две стотинки) лв. с ДДС.

№	Наименование	Марка и модел на техниката, производител	Технически параметри и характеристики на оборудването	Количество	Предлага на ед. цена без ДДС	Предлагана ед. цена с ДДС	Предлага на обща цена без ДДС	Предлагана обща цена с ДДС
1.	МОНОХРОМНО МРЕЖОВО МУЛТИФУНКЦИОНАЛНО УСТРОЙСТВО	HP LaserJet Enterprise MFP M630dn	Формат на медията: A4 Функции: Печат, копиране и сканиране Скорост на копиране/ печат A4 (по ISO): 57 стр./мин. Резолюция при печат: 1200 x 1200 dpi Резолюция при копиране: 600 x 600 dpi Оптична резолюция при сканиране: 600 dpi Скенер: С възможност за цветно сканиране през стъкло и автоматично листоподаващо устройство	8	2 601,00	3 121,20	20 808,00	24 969,60



			Дуплекс: Автоматичен Принтерски езици: PCL, PS, native PDF Процесор: 800 Mhz Памет: 1.5 GB Максимално месечно натоварване: 250 000 страници Препоръчително месечно натоварване: 28 000 страници Входящ капацитет за хартия: 600 листа (80гр./м2) Изходящ капацитет за хартия: 500 листа (80гр./м2) Автоматично листоподаващо устройство (ADF): 100 листа (80гр./м2) Контролен панел (Touch Screen): 20.3 cm SVGA 800 x 600 Интерфейси: USB и 1Gigabit Ethernet Интерфейсни кабели: Устройството се доставя с всички необходими интерфейсни и захранващи кабели Гаранция: 36 месеца (U1ZU5E)				
			Формат на медията: A3 Функции: Печат, копиране и сканиране				
МОНОХРОМНО А3 МРЕЖОВО МУЛТИФУНКЦИ ОНАЛНО	HP LaserJet Enterprise MFP M725dn	Скорост на копиране/печат А4 (по ISO): 41 стр./мин. Резолюция при печат: 1200 x 1200 dpi Резолюция при копиране: 600 x 400 dpi	3	3 785,00	4 542,00	11 355,00	13 626,00



000000

2

Handwritten signature

Handwritten signature



				<p>Оптика резолюция при сканиране: 600 dpi                  Скенер: Възможност за цветно сканиране през стъкло и автоматичното листоподаващо устройство                  Дуплекс: Автоматичен                  Принтерски езици: PCL, PS, PDF 1.4                  Процесор: 800 MHz                  Памет: 1 GB                  Максимално месечно натоварване: 200 000 страници                  Препоръчително месечно натоварване: 20 000 страници                  Входящ капацитет за хартия: 600 листа (80гр./м2)                  Изходящ капацитет за хартия: 250 листа (80гр./м2)                  Автоматично листоподаващо устройство (ADF): 100 листа (80гр./м2)                  Контролен панел: (Touch Screen) 20.3 cm                  Интерфейси: USB и 1 Gigabit Ethernet                  Гаранция: 36 месеца (U7A14E)                  Формат на мезията: A4                  Функции: Цветен печат                  Скорост на копиране/ печат A4 (по ISO): 42 стр./мин.                  Резолюция при печат: 2400 x 1200 dpi                  Дуплекс: Автоматичен                  Принтерски езици: PCL, PS, native PDF                  Процесор: 796 MHz</p>					<p>ЦВЕТЕН А4 МРЕЖОВИ ПРИНТЕР</p>			2	1 185.00	1 422.00					2 844.00
--	--	--	--	--	--	--	--	--	----------------------------------	--	--	---	----------	----------	--	--	--	--	----------



3.

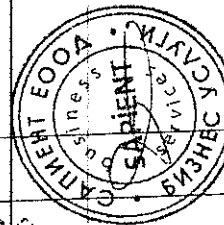
000000

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten mark]*

	<p>Памет: 1280 MB          Максимално месечно натоварване: 80 000 страници          Препоръчително месечно натоварване: 6 000 страници          Входящ капацитет за хартия: 550 листа (80гр./м2)          Изходящ капацитет за хартия: 300 листа (80гр./м2)          Контролен панел: 10.92 cm CGD (Colour Graphic Display) touchscreen          Интерфейси: USB, 1Gigabit Ethernet, 802.11 b/g/n          Гаранция: 36 месеца (U1XS7E)</p>																																																																																																	
4.	ПРЕНОСИМ КОМПЮТЪР			HP ProBook 430 G2		2	1 520,30		1 824,36		3 040,60		3 648,72																																																																																					



800 000 000

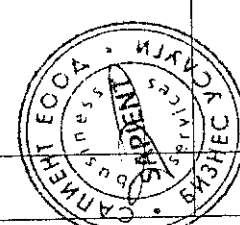
Handwritten signature or initials.

Handwritten signature or initials.

Handwritten signature or initials.

BUSINESS SERVICES  
**SAPIENT**

	<p><b>Портове:</b> 3 USB порта (2 от които версия 3.0), VGA, HDMI, RJ-45, четещ на мултимедийни карти, комбиниран жак за слушалки и микрофон</p> <p><b>Сигурност:</b> Четещ на пръстов отпечатък, слот за заключване</p> <p><b>Операционна система:</b> MS Windows 8.1 OEM 64-битова, предварително инсталирана + предварително инсталиран MS Office Home and Business 2013 32-bit/x64</p> <p><b>Клавиатура:</b> С надписи по БДС от производителя, устойчива на разливи на течности</p> <p><b>Батерия:</b> 4 клетъчна Li-Ion батерия с време на автономна работа до 8 часа и 30 минути</p> <p><b>Тегло:</b> 1.50 кг. с батерията</p> <p><b>Гаранция:</b> 36 месеца от производителя, доказано с партиден номер UK703E – HP 3 year Next business day onsite Notebook Only Service</p>		
	<p>HP ML310e                  Gen8 v2 HP                  4LFF CTO Svr</p>	<p>7</p>	<p>23 772,00</p>
	<p>5. Сървър</p>	<p>19 810,00</p>	<p>3 396,00</p>
	<p>Оперативна памет: HP 8GB (1x8GB) Dual Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11</p> <p>Memory Kit с възможност за разширение до 32GB - парт № 669324-B21</p>		
	<p>Контролер: Поддръжка на нива</p>		



5.

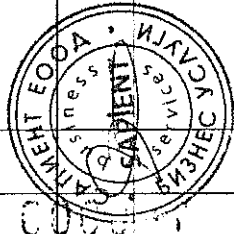
000000

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten mark]*

		<p>на защита RAID 0, 1, 10 с поддръжка на 4 диска - SATA и SSD -HP Dynamic Smart Array B120i Controller (RAID 0/1/10)</p> <p><b>Твърда диск:</b> 2 бр. 1TB SATA Hot-Plug, - HP 1TB 6G SATA 7.2k 3.5in SC MDL HDD парт № 657750-B21</p> <p>Наличие на вътрешен SD Card слот или USB за инсталиране на хипервайзор: AA</p> <p>Захранване: 460W и ефективност 92%, добавени са нужните компоненти позволяващи реализиране на резервираност и горещо замяна само чрез добавяне на втори захранващ модул - HP 460W CS Gold Ht Plg Pwr Supply Kit парт № 503296-B21; HP 4U RPS Enablement Kit парт № 675843-B21</p> <p><b>Форм фактор:</b> Tower</p> <p><b>Мрежови интерфейси:</b> 4 активни свободни PCIe слотове</p> <p><b>Сигурност:</b> Възможност за добавяне на TPM модул</p> <p>Разширение: 4 активни свободни PCIe слотове</p> <p>Управление: Отделен 1 Gbps порт с възможност за отдалечено управление и диагностика - HP iLO standard</p> <p><b>Гаранция:</b> 3 години с гарантирана реакция на следващия работен ден</p> <p>доказана с каталожен номер от производителя - кат№ U2FR6E -</p>			



	HP 3 year Call to Repair ML310e Foundation Care Service				
		Обща цена:	11 921,30	14 305,56	57 383,60
					68 860,32

Цена на инсталиране и въвеждане в експлоатация - **2 845,00** (две хиляди осемстотин четиридесет и пет) лв. без ДДС или **3 414,00** ( три хиляди четиристотин и четиринадесет)лв. с ДДС .

**2. Цената е образувана по Техническа спецификация – Приложение 1:**  
Забележка: В цената да се включат всички разходи за изпълнение на поръчката, включително гаранционното обслужване.

Класирането на участниците се извършва по най-ниска предложена обща цена без ДДС.  
Да се опишат всички резервни части с консумативен характер.  
Всички неописани части следва да бъдат включени в гаранционното обслужване и няма да бъдат заплащани от Възложителя по време на гаранцията.

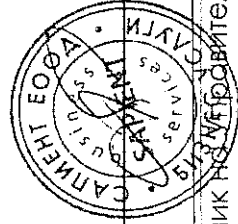
## II. ДРУГИ

Там, където се налага, са приложени допълнителни листа към образеца на ценовата оферта, с оглед детайлно описание на позициите по офертата:

Посочените условия включват всички разходи по изпълнение на предмета на поръчката.  
Предложените условия са определени при пълно съответствие с условията за образуване на предлаганата цена от документацията, съгласно техническото задание.

Настоящото финансово предложение и поети ангажименти са валидни за срок от 120 считано от датата, която е посочена за дата на получаване на офертата.

Настоящото финансово предложение е неразделна част от предложението ни за участие в открита процедура за възлагане на обществена поръчка по реда на Закона за обществените поръчки.

28.08.2015 г.

ПОДПИС И ПЕЧАТ:

Даниела Христова – Пълномощник на Управлятеля на САПИЕНТ ЕООД