



Lenovo RackSwitch G7028

Product Guide (withdrawn product)

The Lenovo RackSwitch™ G7028 is an inexpensive, entry-level Layer 2 1/10 Gb Ethernet switch that is designed for the data center. Data center customers continue to deploy applications by using 1 GbE networking switches while 10 GbE continues to grow for customer solutions that require greater I/O bandwidth. The RackSwitch G7028 is an ideal solution for data center customers who need an economical 1 Gb and 10 Gb connectivity solution.

The RackSwitch G7028 (see the following figure) is a top-of-rack data center switch that delivers excellent non-blocking, wire speed performance at an attractive price point. It supports 24x 10/100/1000BASE-T RJ-45 ports and four 10 Gigabit Ethernet SFP+ ports standard, while typically using only 45 watts of power. The RackSwitch G7028 is also designed with rear-to-front airflow, which allows for flexible mounting of the switch in a rack cabinet and provides convenient cable management and significant savings in cooling costs.



Figure 1. Lenovo RackSwitch G7028

Did you know?

The RackSwitch G7028 is designed with non-blocking, line-rate throughput.

The RackSwitch G7028 supports an optional external redundant power supply with the Lenovo RackSwitch G7000 Redundant Power Supply option.

The RackSwitch G7028 is designed specifically for the data center environment with server-matching airflow, cost-effective Layer 2 switching and ease of configuration management.

Networking Operating System software features deliver seamless, standards-based integration into upstream switches.

Key features

The RackSwitch G7028 switch is considered particularly suited for the following customers:

- Customers who want to use GbE in their infrastructure (servers and networking)
- Customers who are implementing a virtualized environment and require multiple GbE ports
- Customers who require investment protection for 10 GbE ports
- Customers who want to reduce total cost of ownership (TCO) and improve performance while
 maintaining high levels of availability and security
- Customers who want to avoid or minimize oversubscription, which can result in congestion and loss of performance
- Customers who want to implement a converged infrastructure with NAS or iSCSI

The G7028 switch offers the following key features and benefits:

- Increases network performance
 The RackSwitch G7028 provides up to 128 Gbps of switching throughput, supports four SFP+ 10 Gb uplink ports for zero oversubscription, and has a port to port latency of 3.3 microseconds.
- Lower power and exceptional cooling
 The RackSwitch G7028 typically uses only 45 W of power. Unlike side-cooled switches, which can
 cause heat recirculation and reliability concerns, the RackSwitch G7028 switch's rear-to-front cooling
 design reduces data center air conditioning costs by matching airflow to the server's configuration in
 the rack.
- Fault tolerance
 These switches learn alternative paths automatically and perform faster convergence if there is a link, switch, or power failure. The switch uses technologies, such as Virtual Link Aggregation, L2 trunk failover, and Hot Links.
- Seamless interoperability
 RackSwitch switches interoperate seamlessly with other vendors' upstream switches.

The RackSwitch G7028 supports an optional external redundant power supply with the Lenovo RackSwitch G7000 Redundant Power Supply (RPS) option that is shown in the following figure.



Figure 2. Lenovo RackSwitch G7000 Redundant Power Supply

The G7000 RPS option has the following features:

- Form factor: 1U rack mount
- Power connections: Four DC connections in the rear of the rack to connect to the G7028 and G7052 switches; one AC inlet connector to connect to the power source (rack PDU or wall connector)
- · Airflow: Rear-to-front cooling
- Power: Approximately 55 276 W, which varies depending upon operating conditions and number and types of switches connected
- Rack installation: Generic rack-mount kit (2-post); optional flexible 4-post mounting option for the server rack and the communications rack
- · LEDs: System LEDs to indicate status

Components and connectors

The front panel of the RackSwitch G7028 is shown in the following figure.

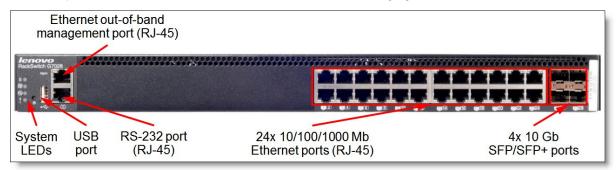


Figure 3. Front panel of the RackSwitch G7028

The front panel of the G7028 contains the following components:

- LEDs that display the status of the switch module and the network.
- One RJ-45 RS-232 console port that provides another means to configure the switch module.
- A total of 24 1000BASE-T Ethernet ports for 10/100/1000 Mbps connections.
- Four SFP+ ports to attach SFP/SFP+ transceivers for 1 Gb or 10 Gb connections or DAC cables for 10 Gb Ethernet connections.
- One RJ-45 10/100/1000 Mb Ethernet port for out-of-band management.

The rear panel of the RackSwitch G7028 is shown in the following figure.



Figure 4. Rear panel of the RackSwitch G7028

The rear panel of the G7028 contains the following components:

- One AC power connector (IEC 320-C14)
- Three fans with N+1 redundancy
- One DC power connector for power supply redundancy

The rear panel of the RackSwitch G7000 RPS option is shown in the following figure.



Figure 5. Rear panel of the RackSwitch G7000 RPS option

The rear panel of the G7000 RPS option contains the following components:

- One AC power connector (IEC-320 C14)
- Four DC power connectors

System specifications

The following table lists the RackSwitch G7028 system specifications.

Table 1. System specifications

| Attribute | Specification |
|----------------------|--|
| Form factor | 1U rack mount |
| Ports | 24x Gigabit Ethernet (GbE) RJ-45 fixed ports 4x SFP/SFP+ ports |
| SFP/SFP+ media types | 10 Gb Ethernet SFP+: • 10 GbE short-range (SR) SFP+ transceivers • 10 GbE long-range (LR) SFP+ transceivers • 10 GbE RJ-45 SFP+ transceivers • 10 GbE SFP+ active optical cables (AOCs) • 10 GbE SFP+ direct attach copper (DAC) cables |
| | 1/10 Gb Ethernet SFP+: • 1/10 GbE SX/SR SFP+ transceivers 1 Gb Ethernet SFP: |
| | 1 GbE short-wavelength (SX) SFP transceivers 1 GbE long-wavelength (LX) SFP transceivers 1 GbE RJ-45 SFP transceivers |
| Port speeds | 1 GbE RJ-45 fixed ports: 10/100/1000 Mbps autosensing 10 GbE SFP+ transceivers, DAC cables and AOCs: 10 Gbps 1/10 GbE SFP+ transceivers: 1 Gbps or 10 Gbps 1 GbE SFP transceivers: 1 Gbps |
| Switching method | Cut-through. |
| Data traffic types | Unicast, multicast, broadcast. |
| Software features | Lenovo Networking OS: Layer 2 switching, virtual local area networks (VLANs), VLAN tagging, spanning tree protocol (STP), link aggregation (trunk) groups (LAGs), virtual LAGs (vLAGs), Hot Links, Layer 2 failover, quality of service (QoS), IP v4 management, IP v6 management. |
| Performance | Non-blocking architecture with wire-speed forwarding of traffic: • Up to 128 Gbps aggregated throughput • As low as 3.3 microseconds switching latency • Up to 96 Million packets per second (Mpps) • Up to 12,288-byte jumbo frames |
| Scalability | MAC address forwarding database entries: 8,000 VLANs: 4,095 (512 active VLANs) Per VLAN Rapid Spanning Tree (PVRST) instances: 128 Multiple STP (MSTP) instances: 32 Link aggregation groups: 16 Ports in a link aggregation group: 8 |
| Cooling | Three 2+1 redundant fixed fans. Rear (non-port side) to front (port side) airflow. |
| Power supply | One fixed 90 W AC (100 - 240 V) power supply (IEC 320-C14 connector). Optional external power supply unit (PSU) is available for redundancy (one PSU with 4x 90 W DC output for up to four G7028 or G7052 switches). |
| Hot-swap parts | SFP/SFP+ transceivers, SFP+ DAC cables. |
| Management ports | 1x 10/100/1000 Mb Ethernet port (RJ-45); 1x RS-232 port (RJ-45); 1x USB port (for additional firmware, log, and configuration files storage). |
| | |

| Attribute | Specification |
|-------------------------------|--|
| Management interfaces | Industry standard command line interface (isCLI); SNMP v1 and v3. Optional Lenovo XClarity for discovery, inventory, monitoring and events. |
| Security features | Secure Shell (SSH); Secure Copy (SCP); Secure FTP (sFTP); user level security, Role-based Access Control (RBAC); LDAP/LDAPS, RADIUS, and TACACS+ authentication; access control lists (ACLs); port-based network access control (IEEE 802.1x). |
| Hardware warranty | Three-year Customer Replaceable Unit limited warranty with 9x5 Next Business Day Parts Delivered. Optional warranty service upgrades are available through Lenovo: onsite service, 24x7 coverage, 2-hour or 4-hour response time, 1-year or 2-year post-warranty extensions, Premier support, and basic installation services. |
| Software maintenance | Three-year software support and subscription is included in the base warranty. Optional 1-year and 2-year warranty extensions include software support and subscription. |
| Mean Time Between Failures | 128,407 hours with ambient operating temperature of 40° C |
| Dimensions | Height: 44 mm (1.7 in.); width: 439 mm (17.3 in.); depth: 382 mm (15.0 in.) |
| Weight | 5.3 kg (11.7 lb). |

Models

The following table lists the G7028 switch models.

Table 2. G7028 switch models

| Description | Part number | Machine Type-Model | Feature code |
|---|----------------|-----------------------|--------------|
| Lenovo RackSwitch G7028 (Rear-to-Front) | 7159BAX | 7159-HCP | AT09 |

The part number for the G7028 switch includes the following items:

- One Lenovo RackSwitch G7028
- Generic Rack Mount Kit (2-post)
- Power Cord Retention Clip
- Console Cable Kit:
 - RJ-45 (plug) to RJ-45 (plug) cable (1 m)
 - Mini-USB to RJ-45 (jack) cable (0.2 m)
 - DB-9 to RJ-45 (jack) adapter
- Documentation package

Configuration notes:

- Power cables are not included and must be ordered together with the switch (see "Power supplies and cables" for details).
- SFP/SFP+ transceivers and cables are not included and should be ordered together with the switch, if required (see "Transceivers and cables" for details).

Transceivers and cables

With the flexibility of the G7028 switch, customers can choose the following connectivity technologies:

- For 1 GbE links, customers can use RJ-45 UTP cables up to 100 meters. Customers that need longer distances can use the 1000BASE-SX transceivers in the SFP/SFP+ ports, which can drive distances up to 220 meters with 62.5 μ multi-mode fiber (OM1) and up to 550 meters with 50 μ multi-mode fiber (OM2), or the 1000BASE-LX transceivers that support distances up to 10 kilometers with single-mode fiber (1310 nm).
- For 10 GbE links (supported on SFP+ ports), customers can use direct-attached copper (DAC) SFP+ cables for in-rack cabling for distances up to 7 meters or SFP+ active optical cables (AOCs) for distances up to 20 meters. These cables have SFP+ connectors on each end, and they do not need separate transceivers. For distances up to 30 meters, the 10GBASE-T SFP+ transceiver can be used with Category 6a or 7 RJ-45 UTP cables.
 - For longer distances, the 10GBASE-SR transceiver can support distances up to 300 meters over OM3 multimode fiber or up to 400 meters over OM4 multimode fiber. The 10GBASE-LR transceivers can support distances up to 10 kilometers on single mode fiber.

The supported SFP/SFP+ and DAC cable options are listed in the following table.

Table 3. Supported SFP/SFP+ transceivers and DAC cables

| Description | Part number | Feature code | Maximum quantity supported |
|--|------------------|--------------|----------------------------|
| SFP transceivers - 1 GbE | • | | |
| Lenovo 1000BASE-T (RJ-45) SFP Transceiver (no 10/100 Mbps support) | 00FE333 | A5DL | 4 |
| Lenovo 1000BASE-SX SFP Transceiver | 81Y1622 | 3269 | 4 |
| Lenovo 1000BASE-LX SFP Transceiver | 90Y9424 | A1PN | 4 |
| UTP Category 5E cables for 1 GbE RJ-45 ports: Fixed ports, management, S | SFP transceivers | ; | |
| 0.6m Green Cat5e Cable | 40K5563 | 3796 | 29 |
| 1.5m Blue Cat5e Cable | 40K8785 | 3802 | 29 |
| 1.5m Green Cat5e Cable | 40K5643 | 3797 | 29 |
| 3m Blue Cat5e Cable | 40K5581 | 3803 | 29 |
| 3m Green Cat5e Cable | 40K5793 | 3798 | 29 |
| 3m Yellow Cat5e Cable | 40K8957 | 3793 | 29 |
| 10m Blue Cat5e Cable | 40K8927 | 3804 | 29 |
| 10m Green Cat5e Cable | 40K5794 | 3799 | 29 |
| 25m Blue Cat5e Cable | 40K8930 | 3805 | 29 |
| 25m Green Cat5e Cable | 40K8869 | 3800 | 29 |
| SFP+ transceivers - 10 GbE | | | |
| Lenovo Dual Rate 1/10Gb SX/SR SFP+ Transceiver | 00MY034 | ATTJ | 4 |
| Lenovo 10Gb SFP+ SR Transceiver (10GBASE-SR) | 46C3447 | 5053 | 4 |
| Lenovo 10Gb SFP+ LR Transceiver (10GBASE-LR) | 90Y9412 | A1PM | 4 |
| Lenovo 10GBASE-LR SFP+ Transceiver | 00FE331 | B0RJ | 4 |
| Lenovo 10GBASE-T SFP+ Transceiver | 7G17A03130 | AVV1 | 4 |
| Optical cables for 1 GbE SFP SX and 10 GbE SFP+ SR transceivers | | | |
| Lenovo 0.5m LC-LC OM3 MMF Cable | 00MN499 | ASR5 | 4 |
| Lenovo 1m LC-LC OM3 MMF Cable | 00MN502 | ASR6 | 4 |

| Description | Part number | Feature code | Maximum quantity supported |
|--|--------------------------|--------------|----------------------------|
| Lenovo 3m LC-LC OM3 MMF Cable | 00MN505 | ASR7 | 4 |
| Lenovo 5m LC-LC OM3 MMF Cable | 00MN508 | ASR8 | 4 |
| Lenovo 10m LC-LC OM3 MMF Cable | 00MN511 | ASR9 | 4 |
| Lenovo 15m LC-LC OM3 MMF Cable | 00MN514 | ASRA | 4 |
| Lenovo 25m LC-LC OM3 MMF Cable | 00MN517 | ASRB | 4 |
| Lenovo 30m LC-LC OM3 MMF Cable | 00MN520 | ASRC | 4 |
| UTP Category 6 cables for RJ-45 ports: 1 GbE fixed, 1 GbE mana | agement, 1 GbE SFP/10 Gb | E SFP+ tr | ansceivers |
| 10m Cat6 Blue Cable | 90Y3721 | A1MU | 29 |
| 10m Cat6 Green Cable | 90Y3718 | A1MT | 29 |
| 10m Cat6 Yellow Cable | 90Y3715 | A1MS | 29 |
| 25m Cat6 Blue Cable | 90Y3730 | A1MX | 29 |
| 25m Cat6 Green Cable | 90Y3727 | A1MW | 29 |
| 25m Cat6 Yellow Cable | 90Y3724 | A1MV | 29 |
| SFP+ active optical cables - 10 GbE | | | • |
| Lenovo 1m SFP+ to SFP+ Active Optical Cable | 00YL634 | ATYX | 4 |
| Lenovo 3m SFP+ to SFP+ Active Optical Cable | 00YL637 | ATYY | 4 |
| Lenovo 5m SFP+ to SFP+ Active Optical Cable | 00YL640 | ATYZ | 4 |
| Lenovo 7m SFP+ to SFP+ Active Optical Cable | 00YL643 | ATZ0 | 4 |
| Lenovo 15m SFP+ to SFP+ Active Optical Cable | 00YL646 | ATZ1 | 4 |
| Lenovo 20m SFP+ to SFP+ Active Optical Cable | 00YL649 | ATZ2 | 4 |
| SFP+ passive direct-attach cables - 10 GbE | | | |
| Lenovo 0.5m Passive SFP+ DAC Cable | 00D6288 | A3RG | 4 |
| Lenovo 1m Passive SFP+ DAC Cable | 90Y9427 | A1PH | 4 |
| Lenovo 1.5m Passive SFP+ DAC Cable | 00AY764 | A51N | 4 |
| Lenovo 2m Passive SFP+ DAC Cable | 00AY765 | A51P | 4 |
| Lenovo 3m Passive SFP+ DAC Cable | 90Y9430 | A1PJ | 4 |
| Lenovo 5m Passive SFP+ DAC Cable | 90Y9433 | A1PK | 4 |
| Lenovo 7m Passive SFP+ DAC Cable | 00D6151 | A3RH | 4 |
| SFP+ active direct-attach cables - 10 GbE | | | |
| Lenovo 1m Active DAC SFP+ Cable | 00VX111 | AT2R | 4 |
| Lenovo 3m Active DAC SFP+ Cable | 00VX114 | AT2S | 4 |
| Lenovo 5m Active DAC SFP+ Cable | 00VX117 | AT2T | 4 |
| Spare console cables | | | |
| Console Cable Kit Spare (RJ45/DB9) | 90Y9462 | A2MG | 1 |

The network cables that can be used with the switch are listed in the following table.

Table 4. G7028 network cabling requirements

| Transceiver | Standard | Cable | Connector |
|---|-----------------|--|-----------|
| 10 Gb Ethernet | | | |
| 10Gb SR SFP+ (46C3447) 1/10Gb SFP+ (00MY034) | 10GBASE-SR | Up to 30 m with fiber optic cables supplied by Lenovo (see Table 3); up to 300 m with OM3 or up to 400 m with OM4 multimode fiber optic cables | LC |
| 10Gb LR SFP+ (90Y9412, 00FE331) | 10GBASE-LR | 1310 nm single-mode fiber cable up to 10 km | LC |
| 10Gb RJ-45 SFP+ (7G17A03130) | 10GBASE-T | Up to 25 m with UTP Category 6 cables supplied by Lenovo (see Table 3); UTP Category 6a or 7 cables up to 30 m | RJ-45 |
| Active optical cable | 10GBASE-SR | SFP+ active optical cables up to 20 m (see Table 3) | SFP+ |
| Direct attach copper cable | 10GSFP+Cu | SFP+ DAC cables up to 7 m (see Table 3) | SFP+ |
| 1 Gb Ethernet | | | |
| RJ-45 ports (fixed) | 1000BASE-T | Up to 25 m with UTP Category 5E or 6 cables supplied by Lenovo (see Table 3); UTP Category 5, 5E, or 6 cables up to 100 m | RJ-45 |
| 1Gb RJ-45 SFP (00FE333) | 1000BASE-T | Up to 25 m with UTP Category 5E or 6 cables supplied by Lenovo (see Table 3); UTP Category 5, 5E, or 6 cables up to 100 m | RJ-45 |
| 1Gb SX SFP (81Y1622) 1/10Gb SFP+ (00MY034) | 1000BASE- SX | Up to 30 m with fiber optic cables supplied by Lenovo (see Table 3); 850 nm multimode fiber cable 50 μ (OM2) up to 550 m or 62.5 μ (OM1) up to 220 m | LC |
| 1Gb LX SFP (90Y9424) | 1000BASE-LX | 1310 nm single-mode fiber cable up to 10 km | LC |
| Management ports | | | |
| Ethernet management port | 1000BASE-T | Up to 25 m with UTP Category 5E or 6 cables supplied by Lenovo (see Table 3); UTP Category 5, 5E, or 6 cables up to 100 m | RJ-45 |
| RS-232 serial console port | RS-232 | DB-9/RJ-45-to-RJ-45 (comes with the switch) | RJ-45 |

Software features

Note: The features and specifications that are listed in this section are based on Networking OS 8.4.

The G7028 switch has the following software features:

- Scalability and performance:
 - Media access control (MAC) address learning with automatic updates
 - Static and LACP (IEEE 802.3ad) link aggregation (trunks)
 - Broadcast/multicast storm control
 - IGMP snooping for limit flooding of IP multicast traffic
 - IGMP filtering to control multicast traffic for hosts participating in multicast groups
 - Configurable traffic distribution schemes over trunk links based on source/destination IP or MAC addresses, or both
 - Fast port forwarding for rapid STP convergence
- Availability and redundancy:
 - IEEE 802.1D STP for providing L2 redundancy
 - IEEE 802.1s Multiple STP (MSTP) for topology optimization
 - IEEE 802.1w Rapid STP (RSTP) (provides rapid STP convergence for critical delay-sensitive traffic such as voice or video)
 - Per-VLAN Rapid STP (PVRST) enhancements
 - Layer 2 Trunk Failover to support active/standby configurations of network adapter teaming on servers
 - Hot Links provides basic link redundancy with fast recovery for network topologies that require Spanning Tree to be turned off
- VLAN support:
 - Port-based and protocol-based VLANs
 - Up to 4095 VLANs supported per switch (512 active VLANs), with VLAN numbers 1 4095 (4095 is used for management connection only)
 - 802.1Q VLAN tagging support on all ports
 - 802.1x with Dynamic VLAN assignment
 - Full private VLANs
- Virtualization: Virtual Link Aggregation support
- Security:
 - VLAN-based, MAC-based, and IP-based access control lists (ACLs)
 - 802.1x port-based authentication
 - Multiple user IDs and passwords
 - User access control
 - Radius, TACACS+ and LDAP/LDAPS authentication and authorization
 - Secure Input/Output Module (SIOM) policy: Secure and Legacy modes
- Quality of Service (QoS):
 - Support for IEEE 802.1p, IP ToS/DSCP, and ACL-based (MAC/IP source and destination addresses, VLANs) traffic classification and processing
 - Traffic shaping and re-marking based on defined policies
 - Eight priority queues per port for processing qualified traffic
 - Weighted random early detection with explicit congestion notification (WRED/ECN)
 - CPU priority policies (CoPP)
 - IPv4/IPv6 ACL metering
- IP v4 Layer 3 functions:
 - Host management
 - IP filtering with ACLs
 - Support for DHCP client
 - Support for IGMP snooping and IGMP relay

- IP v6 Layer 3 functions:
 - IPv6 host management
 - IPv6 filtering with ACLs
- Manageability:
 - Industry-standard CLI (isCLI)
 - Simple Network Management Protocol (SNMP V1 and V3)
 - Telnet interface for CLI
 - SSH and SSH v2
 - Secure Copy (SCP)
 - Secure FTP (sFTP)
 - Serial interface for CLI
 - Firmware image update (TFTP, FTP, or USB storage)
 - Lenovo XClarity (optional; sold separately) for discovery, inventory, monitoring and events
- · Monitoring:
 - Switch LEDs for port status and switch module status indication
 - Remote Monitoring (RMON) agent to collect statistics and proactively monitor switch performance
 - Port mirroring for analyzing network traffic passing through the switch
 - Change tracking and remote logging with the syslog feature

Ethernet standards

The G7028 switch supports the following Ethernet standards:

- IEEE 802.1D Spanning Tree Protocol (STP)
- IEEE 802.1s Multiple STP (MSTP)
- IEEE 802.1w Rapid STP (RSTP)
- IEEE 802.1p Class of Service (CoS) prioritization
- IEEE 802.1Q Tagged VLAN (frame tagging on all ports when VLANs are enabled)
- IEEE 802.1x port-based authentication
- IEEE 802.3 10BASE-T Ethernet
- IEEE 802.3u 100BASE-TX Fast Ethernet
- IEEE 802.3ab 1000BASE-T copper twisted-pair Gigabit Ethernet
- IEEE 802.3z 1000BASE-SX short range fiber optics Gigabit Ethernet
- IEEE 802.3z 1000BASE-LX long range fiber optics Gigabit Ethernet
- IEEE 802.3ad Link Aggregation Control Protocol
- IEEE 802.3x Full-duplex Flow Control
- IEEE 802.3ae 10GBASE-SR short range fiber optics 10 Gb Ethernet
- IEEE 802.3ae 10GBASE-LR long range fiber optics 10 Gb Ethernet
- 10GSFP+Cu SFP+ Direct Attach Copper

Power supplies and cables

The RackSwitch G7028 has one fixed 90 W AC (100 - 240 V) power supply with an IEC 320-C14 connector.

Lenovo offers the optional Lenovo RackSwitch G7000 Redundant Power Supply for those customers who require redundant power. The optional power supply can support up to four Lenovo RackSwitch G7028 or G7052 switches.

The part numbers to order the G7000 Redundant Power Supply (RPS) and additional DC cables are listed in the following table.

Table 5. G7000 RPS and DC cable options

| Description | Part number | Feature code |
|---|----------------|--------------|
| Lenovo RackSwitch G7000 Redundant Power Supply | 00AY123 | A4BZ |
| Lenovo RackSwitch G7000 1.8m DC to DC RPS Power Cable | 00AY121 | A4C0 |

The part number for the G7000 Redundant Power Supply (00AY123) includes the following items:

- One Lenovo RackSwitch G7000 Redundant Power Supply (rear-to-front airflow)
- Two 1.8 m DC to DC power cables
- Generic Rack Mount Kit (2-post)
- Power Cord Retention Kit
- Documentation package

The G7000 RPS option comes standard with two 1.8 m DC to DC power cables. More DC-to-DC power cables (part number 00AY121; each part number contains one cable) can be ordered, if needed.

The G7028 switch and G7000 RPS option ship standard without any AC power cables. The part numbers and feature codes to order the AC power cables are listed in the following table.

Table 6. AC power cable options

| Description | Part number | Feature code |
|---|-------------|--------------|
| Rack power cables | | |
| 1.5m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable | 39Y7937 | 6201 |
| 1.8m, 10A/100-250V, 2xC13PM to IEC 320-C14 Rack Power Cable | None* | 6568 |
| 2.8m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable | None* | 6311 |
| 2.8m, 10A/100-250V, C13 to IEC 320-C20 Rack Power Cable | 39Y7938 | 6204 |
| 4.3m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable | 39Y7932 | 6263 |
| Line cords | | |
| Argentina 10A/250V C13 to IRAM 2073 2.8m line cord | 39Y7930 | 6222 |
| Australia/NZ 10A/250V C13 to AS/NZ 3112 2.8m line cord | 39Y7924 | 6211 |
| Brazil 10A/125V C13 to NBR 6147 2.8m line cord | 39Y7929 | 6223 |
| China 10A/250V C13 to GB 2099.1 2.8m line cord | 39Y7928 | 6210 |
| Denmark 10A/250V C13 to DK2-5a 2.8m line cord | 39Y7918 | 6213 |
| European 10A/230V C13 to CEE7-VII 2.8m line cord | 39Y7917 | 6212 |
| India 10A/250V C13 to IS 6538 2.8m line cord | 39Y7927 | 6269 |
| Israel 10A/250V C13 to SI 32 2.8m line cord | 39Y7920 | 6218 |
| Italy 10A/250V C13 to CEI 23-16 2.8m line cord | 39Y7921 | 6217 |
| Japan 12A/125V C13 to JIS C-8303 2.8m line cord | 46M2593 | A1RE |
| Korea 12A/250V C13 to KETI 2.8m line cord | 39Y7925 | 6219 |
| South Africa 10A/250V C13 to SABS 164 2.8m line cord | 39Y7922 | 6214 |
| Switzerland 10A/250V C13 to SEV 1011-S24507 2.8m line cord | 39Y7919 | 6216 |
| Taiwan 10A/250V C13 to CNS 10917-3 2.8m line cord | 00CG265 | A53E |
| Taiwan 15A/125V C13 to CNS 10917-3 2.8m line cord | 00CG267 | A53F |
| United Kingdom 10A/250V C13 to BS 1363/A 2.8m line cord | 39Y7923 | 6215 |
| United States 10A/125V C13 to NEMA 5-15P 4.3m line cord | 39Y7931 | 6207 |
| United States 10A/250V C13 to NEMA 6-15P 2.8m line cord | 46M2592 | A1RF |

^{*} Available for factory-built custom configurations and solutions only.

Rack installation

The G7028 switch and G7000 RPS option include a 2-post rack mount kit.

For 4-post rack installations, the G7028 switch and G7000 RPS support the optional adjustable 19-inch, 4-post rail kit and the air inlet duct (optional for the 4-post rail kit) that are listed in the following table.

Table 7. Rack installation options

| Description | Part number | Feature code |
|--|----------------|--------------|
| Lenovo RackSwitch Adjustable 19-inch 4 Post Rail Kit | 00D6185 | A3KP |
| Air Inlet Duct for 382 mm RackSwitch | 00D6062 | A3HG |

Physical specifications

The G7028 switch features the following approximate dimensions and weight:

- Height: 44 mm (1.7 in.)
- Width: 440 mm (17.3 in.)
- Depth: 382 mm (15.0 in.)
- Weight: 5.3 kg (11.7 lb)

The G7000 RPS option features the following approximate dimensions and weight:

- Height: 44 mm (1.7 in.)
- Width: 444 mm (17.3 in.)
- Depth: 382 mm (15.0 in.)
- Weight: 5.4 kg (11.9 lb)

Operating environment

The G7028 switch is supported in the following operating environment:

- Temperature: 0 40 °C.
- Relative humidity: Non-condensing, 10 90%
- Altitude: 2,000 m (6,561 feet)
- · Acoustic noise: Less than 65 dB
- Input volt-amperes (VA)
 - Typical: 45 VA
 - Maximum: 58 VA
- Heat dissipation
 - Typical: 165 BTU/hour
 - Maximum: 200 BTU/hour

The G7000 RPS option is supported in the following operating environment:

- Temperature: 0 40 °C.
- Relative humidity: Non-condensing, 10 90%
- Altitude: 2,000 m (6,561 feet)
- · Acoustic noise: Less than 65 dB
- Input volt-amperes (VA)
 - Typical: 245 VA
 - Maximum: 413 VA
- Heat dissipation: 1,239 BTU/hour (maximum)

Warranty and maintenance

The RackSwitch G7028 comes with a 3-year Customer Replaceable Unit (CRU) hardware limited warranty with 9x5 Next Business Day (NBD) Parts Delivered and includes a 3-year software license, which provides entitlement to upgrades over that period. The options that are installed in the switch assume the switch's base warranty and any Lenovo warranty service upgrade for the switch.

Some regions might have different warranty terms and conditions than the standard warranty. This is due to local business practices or laws in the specific region. Local service teams can assist in explaining region-specific terms when needed. Examples of region-specific warranty terms are second or longer business day parts delivery or parts-only base warranty.

If warranty terms and conditions include onsite labor for repair or replacement of parts, Lenovo will dispatch a service technician to the customer site to perform the replacement. Onsite labor under base warranty is limited to labor for replacement of parts that have been determined to be field-replaceable units (FRUs). Parts that are determined to be customer-replaceable units (CRUs) do not include onsite labor under base warranty.

If warranty terms include parts-only base warranty, Lenovo is responsible for delivering only replacement parts that are under base warranty (including FRUs) that will be sent to a requested location for self-service. Parts-only service does not include a service technician being dispatched onsite. Parts must be changed at customer's own cost and labor and defective parts must be returned following the instructions supplied with the spares parts.

Also available are Lenovo Services warranty maintenance upgrades and post-warranty maintenance agreements, with a well-defined scope of services, including service hours, response time, term of service, and service agreement terms and conditions.

Lenovo warranty service upgrade offerings are region-specific. Not all warranty service upgrades are available in every region. For information about Lenovo warranty service upgrade offerings that are available in your region, refer to the following resources:

- Service part numbers in Lenovo Data Center Solutions Configurator (DCSC): http://dcsc.lenovo.com/#/services
- Lenovo Services Availability Locator https://lenovolocator.com/

In general, the following Lenovo warranty service upgrades are available:

- Warranty and maintenance service upgrades:
 - o 3, 4, or 5 years of warranty service coverage
 - 1-year or 2-year post-warranty extensions
 - Foundation Service: 9x5 service coverage with next business day onsite response
 - Essential Service: 24x7 service coverage with 4-hour onsite response or 24-hour committed repair (available only in select regions)
 - Advanced Service: 24x7 service coverage with 2-hour onsite response or 6-hour committed repair (available only in select regions)
- Premier Support

Premier Support service offers direct access to Lenovo's most advanced technicians for faster troubleshooting with single point of contact for end-to-end problem resolution and collaborative third-party software support.

Basic Hardware Installation Services

Lenovo experts can seamlessly manage the physical installation of your server, storage, or networking hardware. Working at a time convenient for you (business hours or off shift), the technician will unpack and inspect the systems on your site, install options, mount in a rack cabinet, connect to power and network, check and update firmware to the latest levels, verify operation, and dispose of the packaging, allowing your team to focus on other priorities.

For service definitions, region-specific details, and service limitations, please refer to the following documents:

- Lenovo Statement of Limited Warranty for Infrastructure Solutions Group (ISG) Servers and System Storage
 - http://pcsupport.lenovo.com/us/en/solutions/ht503310
- Lenovo Data Center Services Agreement http://support.lenovo.com/us/en/solutions/ht116628

Regulatory compliance

The switch conforms to the following regulations:

- Safety certifications:
 - o UL60950-1
 - CAN/CSA 22.2 No.60950-1
 - TUV/GS to EN 60950-1
 - IEC 60950-1, all country deviations
 - o CNS 14336-1
 - Argentina Smark to IEC 60950-1
 - o GB4943.1-2011
 - EAC
 - NOM-019
- Electromagnetic compatibility certifications:
 - FCC 47CFR Part 15 Class A
 - EN 55022 Class A
 - ICES-003 Class A
 - VCCI Class A
 - AS/NZS CISPR 22 Class A
 - o CISPR 22 Class A
 - o EN 55024
 - KCC Class A
 - CE
- Environmental: Reduction of Hazardous Substances (ROHS) Directive 2011/65/EU

Network connectivity

The following table lists the network switches that are offered by Lenovo that can be used in RackSwitch G7028 network connectivity solutions.

Table 8. Network switches

| Description | Part number |
|---|-------------|
| 1 Gb Ethernet switches | |
| Lenovo ThinkSystem NE0152T RackSwitch (Rear to Front) | 7Y810011WW |
| Lenovo ThinkSystem NE0152TO RackSwitch (Rear to Front, ONIE) | 7Z320O11WW |
| Lenovo RackSwitch G7052 (Rear to Front) | 7159CAX |
| Lenovo RackSwitch G8052 (Rear to Front) | 7159G52 |
| 10 Gb Ethernet switches | |
| Lenovo ThinkSystem NE1032 RackSwitch (Rear to Front) | 7159A1X |
| Lenovo ThinkSystem NE1032T RackSwitch (Rear to Front) | 7159B1X |
| Lenovo ThinkSystem NE1072T RackSwitch (Rear to Front) | 7159C1X |
| Lenovo RackSwitch G8124E (Rear to Front) | 7159BR6 |
| Lenovo RackSwitch G8272 (Rear to Front) | 7159CRW |
| Lenovo RackSwitch G8296 (Rear to Front) | 7159GR6 |
| 25 Gb Ethernet switches (10 GbE connectivity out of an SFP28 port) | |
| Lenovo ThinkSystem NE2572 RackSwitch (Rear to Front) | 7159E1X |
| Lenovo ThinkSystem NE2572O RackSwitch (Rear to Front, ONIE) | 7Z210O21WW |
| 100 Gb Ethernet switches (4x 10 GbE breakout connectivity out of a QSFP28 port) | |
| Lenovo ThinkSystem NE10032 RackSwitch (Rear to Front) | 7159D1X |
| Lenovo ThinkSystem NE10032O RackSwitch (Rear to Front, ONIE) | 7Z210O11WW |

For more information, see the list of Product Guides in the Top-of-rack Switches category: http://lenovopress.com/servers/options/switches

Storage connectivity

The following table lists the external storage systems that are currently offered by Lenovo that can be used with the RackSwitch G7028 for external NAS or iSCSI SAN storage connectivity.

Table 9. External storage systems: DE Series

| | Part number | |
|---|-------------|------------|
| Description | Worldwide | Japan |
| Lenovo ThinkSystem DE Series Storage (iSCSI connectivity) | | |
| Lenovo ThinkSystem DE2000H 10GBASE-T Hybrid Flash Array LFF | 7Y70A003WW | 7Y701001JP |
| Lenovo ThinkSystem DE2000H 10GBASE-T Hybrid Flash Array SFF | 7Y71A002WW | 7Y711005JP |
| Lenovo ThinkSystem DE2000H iSCSI Hybrid Flash Array LFF | 7Y70A004WW | 7Y701000JP |
| Lenovo ThinkSystem DE2000H iSCSI Hybrid Flash Array SFF | 7Y71A003WW | 7Y711006JP |
| Lenovo ThinkSystem DE4000H iSCSI Hybrid Flash Array 4U60 | 7Y77A000WW | 7Y771002JP |
| Lenovo ThinkSystem DE4000H iSCSI Hybrid Flash Array LFF | 7Y74A002WW | 7Y74A002JP |
| Lenovo ThinkSystem DE4000H iSCSI Hybrid Flash Array SFF | 7Y75A001WW | 7Y75A001JP |

| | Part number | |
|--|-------------|------------|
| Description | Worldwide | Japan |
| Lenovo ThinkSystem DE4000F iSCSI All Flash Array SFF | 7Y76A002WW | 7Y76A002JP |
| Lenovo ThinkSystem DE6000H iSCSI Hybrid Flash Array 4U60 | 7Y80A002WW | 7Y801000JP |
| Lenovo ThinkSystem DE6000H iSCSI Hybrid Flash Array SFF | 7Y78A002WW | 7Y781000JP |
| Lenovo ThinkSystem DE6000F iSCSI All Flash Array SFF | 7Y79A002WW | 7Y79A002JP |

Table 10. External storage systems: DM Series

| Description | Part number |
|---|-------------|
| Lenovo ThinkSystem DM Series Storage (NAS or iSCSI connectivity) | |
| Lenovo ThinkSystem DM3000H Hybrid Storage Array (2U12 LFF, CTO only) | 7Y42CTO1WW |
| Lenovo ThinkSystem DM3000H 48TB (12x 4TB HDDs) (Universal SFP+) | 7Y420001EA* |
| Lenovo ThinkSystem DM3000H 48TB (12x 4TB HDDs) (10GBASE-T) | 7Y420002EA* |
| Lenovo ThinkSystem DM5000H Hybrid Storage Array (2U24 SFF, CTO only) | 7Y57CTO1WW |
| Lenovo ThinkSystem DM5000H 11.5TB (12x 960GB SSDs) (Universal SFP+) | 7Y570001EA* |
| Lenovo ThinkSystem DM5000H 11.5TB (12x 960GB SSDs) (10GBASE-T) | 7Y570002EA* |
| Lenovo ThinkSystem DM5000H 29TB (24x 1.2TB 10K HDDs) (Universal SFP+) | 7Y570003EA* |
| Lenovo ThinkSystem DM5000H 29TB (24x 1.2TB 10K HDDs) (10GBASE-T) | 7Y570004EA* |
| Lenovo ThinkSystem DM5000F Flash Storage Array (2U24 SFF, CTO only) | 7Y41CTO1WW |
| Lenovo ThinkSystem DM7000H Hybrid Storage Array (3U, CTO only) | 7Y56CTO1WW |
| Lenovo ThinkSystem DM7000F Flash Storage Array (3U, CTO only) | 7Y40CTO1WW |

^{*} Available only in EMEA.

Table 11. External storage systems: DS Series

| | Part number | | |
|---|-------------|---------|---------|
| Description | Worldwide | Japan | PRC |
| Lenovo ThinkSystem DS Series Storage (iSCSI connectivity) | | | |
| Lenovo ThinkSystem DS2200 LFF FC/iSCSI Dual Controller Unit | 4599A31 | 4599A3J | 4599A3C |
| Lenovo ThinkSystem DS2200 SFF FC/iSCSI Dual Controller Unit | 4599A11 | 4599A1J | 4599A1C |
| Lenovo ThinkSystem DS4200 LFF FC/iSCSI Dual Controller Unit | 4617A31 | 4617A3J | 4617A3C |
| Lenovo ThinkSystem DS4200 SFF FC/iSCSI Dual Controller Unit | 4617A11 | 4617A1J | 4617A1C |
| Lenovo ThinkSystem DS6200 SFF FC/iSCSI Dual Controller Unit | 4619A11 | 4619A1J | 4619A1C |
| DS6200F 12x 400GB 10DWD SSDs, 1x 8Gb FC SFP, 512 Snapshots, Replication | 4619A1F | 4619J1F | 4619C1F |
| DS6200F 12x 800GB 3DWD SSDs, 1x 8Gb FC SFP, 512 Snapshots, Replication | 4619A2F | 4619J2F | 4619C2F |
| DS6200F 12x 1.6TB 3DWD SSDs, 1x 8Gb FC SFP, 512 Snapshots, Replication | 4619A3F | 4619J3F | 4619C3F |
| DS6200F 12x 3.84TB 1DWD SSDs, 1x 8Gb FC SFP, 512 Snapshots, Replication | 4619A4F | 4619J4F | 4619C4F |

Table 12. External storage systems: V Series and Storwize for Lenovo

| Description | Part number |
|---|-------------|
| Lenovo Storage V Series (iSCSI connectivity) | |
| Lenovo Storage V3700 V2 LFF Control Enclosure | 6535C1D |
| Lenovo Storage V3700 V2 SFF Control Enclosure | 6535C2D |
| Lenovo Storage V3700 V2 XP LFF Control Enclosure | 6535C3D |
| Lenovo Storage V3700 V2 XP SFF Control Enclosure | 6535C4D |
| Lenovo Storage V5030 LFF Control Enclosure 3Yr S&S | 6536C12 |
| Lenovo Storage V5030 LFF Control Enclosure 5Yr S&S | 6536C32 |
| Lenovo Storage V5030 SFF Control Enclosure 3Yr S&S | 6536C22 |
| Lenovo Storage V5030 SFF Control Enclosure 5Yr S&S | 6536C42 |
| Lenovo Storage V5030F SFF Control Enclosure 3Yr S&S | 6536B1F |
| Lenovo Storage V5030F SFF Control Enclosure 5Yr S&S | 6536B2F |
| Lenovo Storage V7000 SFF Control Enclosure 3Yr S&S PRC | 6538R11^ |
| Lenovo Storage V7000 SFF Control Enclosure 5Yr S&S PRC | 6538R21^ |
| Lenovo Storage V7000F SFF Control Enclosure 3Yr S&S PRC | 6538R1G^ |
| Lenovo Storage V7000F SFF Control Enclosure 5Yr S&S PRC | 6538R2G^ |
| IBM Storwize for Lenovo (iSCSI connectivity) | |
| IBM Storwize V7000 SFF Control Enclosure, 3YR SWMA | 6195C32† |
| IBM Storwize V7000 SFF Control Enclosure, 3YR SWMA, LA | 6195C3L‡ |
| IBM Storwize V7000 SFF Control Enclosure, 5YR SWMA | 6195C52† |
| IBM Storwize V7000 SFF Control Enclosure, 5YR SWMA, LA | 6195C5L‡ |

[^] Available only in PRC.

For more information, see the list of Product Guides in the following categories:

- Lenovo DE Series, DM Series, DS Series, and V Series storage: http://lenovopress.com/storage/san/lenovo#rt=product-guide
- IBM Storwize for Lenovo storage: http://lenovopress.com/storage/san/ibm#rt=product-guide

[†] Available worldwide except Latin America. ‡ Available only in Latin America.

Rack cabinets

The following table lists the rack cabinets that are offered by Lenovo that can be used in RackSwitch G7028 solutions.

Table 13. Rack cabinets

| Description | Part number |
|---|-------------|
| 25U S2 Standard Rack | 93072RX |
| 25U Static S2 Standard Rack | 93072PX |
| 42U S2 Standard Rack | 93074RX |
| 42U 1100mm Enterprise V2 Dynamic Rack | 93634PX |
| 42U 1100mm Enterprise V2 Dynamic Expansion Rack | 93634EX |
| 42U 1200mm Deep Dynamic Rack | 93604PX |
| 42U 1200mm Deep Static Rack | 93614PX |
| 42U Enterprise Rack | 93084PX |
| 42U Enterprise Expansion Rack | 93084EX |

For more information, see the list of Product Guides in the Rack cabinets category: http://lenovopress.com/servers/options/racks

Power distribution units

The following table lists the power distribution units (PDUs) that are offered by Lenovo that can be used in RackSwitch G7028 solutions.

Table 14. Power distribution units

| Description | Part number |
|---|----------------|
| 0U Basic PDUs | |
| 0U 36 C13/6 C19 24A/200-240V 1 Phase PDU with NEMA L6-30P line cord | 00YJ776 |
| 0U 36 C13/6 C19 32A/200-240V 1 Phase PDU with IEC60309 332P6 line cord | 00YJ777 |
| 0U 21 C13/12 C19 32A/200-240V/346-415V 3 Phase PDU with IEC60309 532P6 line cord | 00YJ778 |
| 0U 21 C13/12 C19 48A/200-240V 3 Phase PDU with IEC60309 460P9 line cord | 00YJ779 |
| Switched and Monitored PDUs | |
| 0U 20 C13/4 C19 Switched and Monitored 24A/200-240V/1Ph PDU w/ NEMA L6-30P line cord | 00YJ781 |
| 0U 20 C13/4 C19 Switched and Monitored 32A/200-240V/1Ph PDU w/ IEC60309 332P6 line cord | 00YJ780 |
| 0U 18 C13/6 C19 Switched / Monitored 32A/200-240V/346-415V/3Ph PDU w/ IEC60309 532P6 cord | 00YJ782 |
| 0U 12 C13/12 C19 Switched and Monitored 48A/200-240V/3Ph PDU w/ IEC60309 460P9 line cord | 00YJ783 |
| 1U 9 C19/3 C13 Switched and Monitored DPI PDU (without line cord) | 46M4002 |
| 1U 9 C19/3 C13 Switched and Monitored 60A 3Ph PDU with IEC 309 3P+Gnd cord | 46M4003 |
| 1U 12 C13 Switched and Monitored DPI PDU (without line cord) | 46M4004 |
| 1U 12 C13 Switched and Monitored 60A 3 Phase PDU with IEC 309 3P+Gnd line cord | 46M4005 |
| Ultra Density Enterprise PDUs (9x IEC 320 C13 + 3x IEC 320 C19 outlets) | |
| Ultra Density Enterprise C19/C13 PDU Module (without line cord) | 71762NX |
| Ultra Density Enterprise C19/C13 PDU 60A/208V/3ph with IEC 309 3P+Gnd line cord | 71763NU |

| Description | Part number |
|--|-------------|
| C13 Enterprise PDUs (12x IEC 320 C13 outlets) | |
| DPI C13 Enterprise PDU+ (without line cord) | 39M2816 |
| DPI Single Phase C13 Enterprise PDU (without line cord) | 39Y8941 |
| C19 Enterprise PDUs (6x IEC 320 C19 outlets) | |
| DPI Single Phase C19 Enterprise PDU (without line cord) | 39Y8948 |
| DPI 60A 3 Phase C19 Enterprise PDU with IEC 309 3P+G (208 V) fixed line cord | 39Y8923 |
| Front-end PDUs (3x IEC 320 C19 outlets) | |
| DPI 30amp/125V Front-end PDU with NEMA L5-30P line cord | 39Y8938 |
| DPI 30amp/250V Front-end PDU with NEMA L6-30P line cord | 39Y8939 |
| DPI 32amp/250V Front-end PDU with IEC 309 2P+Gnd line cord | 39Y8934 |
| DPI 60amp/250V Front-end PDU with IEC 309 2P+Gnd line cord | 39Y8940 |
| DPI 63amp/250V Front-end PDU with IEC 309 2P+Gnd line cord | 39Y8935 |
| Universal PDUs (7x IEC 320 C13 outlets) | <u> </u> |
| DPI Universal 7 C13 PDU (with 2 m IEC 320-C19 to C20 rack power cord) | 00YE443 |
| NEMA PDUs (6x NEMA 5-15R outlets) | |
| DPI 100-127V PDU with fixed NEMA L5-15P line cord | 39Y8905 |
| Line cords for PDUs that ship without a line cord | <u> </u> |
| DPI 30a Line Cord (NEMA L6-30P) | 40K9614 |
| DPI 32a Line Cord (IEC 309 P+N+G) | 40K9612 |
| DPI 32a Line Cord (IEC 309 3P+N+G) | 40K9611 |
| DPI 60a Cord (IEC 309 2P+G) | 40K9615 |
| DPI 63a Cord (IEC 309 P+N+G) | 40K9613 |
| DPI Australian/NZ 3112 Line Cord (32A) | 40K9617 |
| DPI Korean 8305 Line Cord (30A) | 40K9618 |

For more information, see the list of Product Guides in the Power Distribution Units category: http://lenovopress.com/servers/options/pdu

Uninterruptible power supply units

The following table lists the uninterruptible power supply (UPS) units that are offered by Lenovo that can be used in RackSwitch G7028 solutions.

Table 15. Uninterruptible power supply units

| Description | Part number |
|--|----------------|
| Worldwide models | |
| RT1.5kVA 2U Rack or Tower UPS (100-125VAC) (8x NEMA 5-15R 12A outlets) | 55941AX |
| RT1.5kVA 2U Rack or Tower UPS (200-240VAC) (8x IEC 320 C13 10A outlets) | 55941KX |
| RT2.2kVA 2U Rack or Tower UPS (100-125VAC) (8x NEMA 5-20R 16A outlets) | 55942AX |
| RT2.2kVA 2U Rack or Tower UPS (200-240VAC) (8x IEC 320 C13 10A, 1x IEC 320 C19 16A outlets) | 55942KX |
| RT3kVA 2U Rack or Tower UPS (100-125VAC) (6x NEMA 5-20R 16A, 1x NEMA L5-30R 24A outlets) | 55943AX |
| RT3kVA 2U Rack or Tower UPS (200-240VAC) (8x IEC 320 C13 10A, 1x IEC 320 C19 16A outlets) | 55943KX |
| RT5kVA 3U Rack or Tower UPS (200-240VAC) (8x IEC 320 C13 10A, 2x IEC 320 C19 16A outlets) | 55945KX |
| RT6kVA 3U Rack or Tower UPS (200-240VAC) (8x IEC 320 C13 10A, 2x IEC 320 C19 16A outlets) | 55946KX |
| RT8kVA 6U Rack or Tower UPS (200-240VAC) (4x IEC 320-C19 16A outlets) | 55948KX |
| RT11kVA 6U Rack or Tower UPS (200-240VAC) (4x IEC 320-C19 16A outlets) | 55949KX |
| RT8kVA 6U 3:1 Phase Rack or Tower UPS (380-415VAC) (4x IEC 320-C19 16A outlets) | 55948PX |
| RT11kVA 6U 3:1 Phase Rack or Tower UPS (380-415VAC) (4x IEC 320-C19 16A outlets) | 55949PX |
| ASEAN, HTK, INDIA, and PRC models | |
| ThinkSystem RT3kVA 2U Standard UPS (200-230VAC) (2x C13 10A, 2x GB 10A, 1x C19 16A outlets) | 55943KT |
| ThinkSystem RT3kVA 2U Long Backup UPS (200-230VAC) (2x C13 10A, 2x GB 10A, 1x C19 16A outlets) | 55943LT |
| ThinkSystem RT6kVA 5U UPS (200-230VAC) (2x C13 10A outlets, 1x Terminal Block output) | 55946KT |
| ThinkSystem RT10kVA 5U UPS (200-230VAC) (2x C13 10A outlets, 1x Terminal Block output) | 5594XKT |

For more information, see the list of Product Guides in the Uninterruptible Power Supply Units category: http://lenovopress.com/servers/options/ups#rt=product-guide

Lenovo Financial Services

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We work with businesses, non-profit organizations, governments and educational institutions to finance their entire technology solution. We focus on making it easy to do business with us. Our highly experienced team of finance professionals operates in a work culture that emphasizes the importance of providing outstanding customer service. Our systems, processes and flexible policies support our goal of providing customers with a positive experience.

We finance your entire solution. Unlike others, we allow you to bundle everything you need from hardware and software to service contracts, installation costs, training fees, and sales tax. If you decide weeks or months later to add to your solution, we can consolidate everything into a single invoice.

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For your region specific offers please ask your Lenovo sales representative or your technology provider about the use of Lenovo Financial Services. For more information, see the following Lenovo website: http://www.lenovofs.com

Related publications and links

For more information about the RackSwitch G7028, see the following publications that are available at the RackSwitch G7028/G7052 InfoCenter:

http://systemx.lenovofiles.com/help/topic/com.lenovo.rackswitch.g7052.doc/rs g7052.html

- RackSwitch G7028 Installation Guide
- RackSwitch G7028/G7052 Application Guide
- RackSwitch G7028/G7052 Industry Standard CLI Command Reference

For discussions on various Lenovo networking topics, visit the Data Center Networking Community Forum: http://forums.lenovo.com/t5/Datacenter-Networking/ct-p/nh eg

Related product families

Product families related to this document are the following:

- 1 Gb Ethernet Connectivity
- Top-of-Rack Switches

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This document, TIPS1268, was created or updated on February 5, 2019.

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