Eaton 9130 UPS

Features

- Protects against downtime, data loss and process interruption by providing continuous, clean power
- Offers premium performance with a 0.9 power factor and >95 percent efficiency
- Increases battery service life and system uptime with ABM® battery charging technology
- Enables prolonged runtime of essential equipment during power outages by allowing for orderly, remote shutdown of non-critical systems or processes
- Provides installation flexibility with a choice of rack or tower designs, both conserving valuable space
- Ensures data and system integrity with LanSafe® power management software
- Provides a two-year limited warranty, an extended warranty, Flex™ and PowerTrust™ service contracts, and a $250,000 load protection guarantee (US and Canada)

Product snapshot

Product rating:	700 to 3000 VA
Voltage	120 Vac, 208–240V
Frequency:	50/60 Hz (auto-sensing)
Configuration:	Rackmount or tower

Advanced power protection for:

- IT and networking environments
- Servers, networking gear
- Telecommunications, VoIP, security systems
- Medical systems
- Diagnostics and medical screening
- Patient record archives
- Manufacturing systems
- Chip fabrication
- Pharmaceutical production
- Chemical processing

Powering Business Worldwide

A one-stop solution provider-partner, Eaton® provides world-class power protection, power management and distribution products including uninterruptible power systems (UPSs), DC power systems, award-winning power management software and world-class services. Our Powerware® series has been recognized by end-users and industry experts for delivering the highest customer value and satisfaction, as well as for demonstrating insight into customer needs.

The newest Powerware series addition, the **Eaton 9130 UPS**, resolves utility power problems and delivers superior power protection for IT and networking equipment, medical systems, manufacturing process control—or anywhere critical equipment and applications require clean, continuous power.

Double-conversion design for superior power protection

The 9130 is constantly monitoring power conditions—regulating both voltage and frequency. Even when presented with the most severe power problems, this UPS's output remains within three percent of nominal voltage.

With a wide input voltage range, the 9130 does not depend on batteries to smooth out minor power fluctuations. Batteries are conserved for those times when utility power is highly unstable or completely out. If an outage occurs, the 9130 transfers to battery with zero interruption in power, making this an ideal UPS for sensitive and critical equipment.

More real power for less cost

More real power. High 0.9 output power factor enables the 9130 to provide its full power capability to modern IT equipment that may have a wide range of leading and lagging power factors. With a 0.99 input power factor, this UPS avoids the disturbances that some energy converters tend to cause.

High efficiency. The more efficient the UPS, the lower your utility and cooling bills. Even a small increase in efficiency can quickly translate into thousands of dollars. When power conditions are within acceptable limits, the 9130 can operate in a remarkably high-efficiency mode: 95 percent efficient or higher.

Advanced design and self-monitoring for premium availability

The 9130 continually monitors voltage, temperature, internal element functions, battery health, battery state-of-charge and runtime remaining. If the UPS detects a potential problem with any of these measures, it sends alarms or takes corrective action, with no interruption in power. At the end of an alarm condition, the 9130 automatically reverts from bypass to normal operation.

Stronger, longer battery life with exclusive ABM technology

Most UPS manufacturers on the market today employ a constant 'trickle-charging' system, which can ultimately reduce potential battery service life by as much as 50 percent. In contrast, ABM technology uses sophisticated sensing circuitry and an innovative three-stage charging technique that significantly extends UPS batteries' useful service life while optimizing their recharge time.

The 9130 provides up to 60 days' notice of the end of useful battery service life. You have ample time to hot-swap batteries without ever having to shut down connected equipment.

External battery modules for extended runtime

During a power outage, internal batteries in the 9130 keep loads running long enough to gracefully shut down systems. Add more runtime at any time, with up to four external battery modules to run systems for hours if necessary. These battery modules are hot-swappable and can be replaced at any time without powering down the UPS or protected loads. You can also start up the UPS and power its loads with battery power.

BATTERY RUNTIMES

	Internal batteries		+1 EBM		+2 EBMs		+3 EBMs		+4 EBMs	
	100% Load	50% Load	100% Load	50% Load	100% Load	50% Load	100% Load	50% Load	100% Load	50% Load
Rack models										
PW9130L700R-XL2U	9	24	41	85	72	140	105	205	130	270
PW9130L1000R-XL2U	5	17	30	69	55	125	83	191	108	257
PW9130G1000R-XL2U	7	14	29	68	51	113	81	192	98	246
PW9130G1000R-XL2UEU	7	14	29	68	51	113	81	192	98	246
PW9130i1000R-XL2U	7	14	29	68	51	113	81	192	98	246
PW9130L1500R-XL2U	5	12	23	63	48	112	67	167	91	209
PW9130i1500R-XL2U	5	14	24	60	44	68	72	172	89	190
PW9130L2000R-XL2U	6	17	33	70	59	136	88	190	112	254
PW9130G2000R-XL2U	6	16	33	71	59	129	88	183	119	260
PW9130G2000R-XL2UEU	6	16	33	71	59	129	88	183	119	260
PW9130i2000R-XL2U	6	16	33	71	59	129	88	183	119	260
PW9130L2500R-XL2U	4	11	26	45	47	86	71	140	95	209
PW9130G2500R-XL2U	4	12	28	45	49	92	71	141	97	207
PW9130G2500R-XL2UEU	4	12	28	45	49	92	71	141	97	207
PW9130L3000R-XL2U	3	10	20	48	36	90	53	123	71	164
PW9130G3000R-XL2U	3	9	18	45	34	84	53	122	69	165
PW9130G3000R-XL2UEU	3	9	18	45	34	84	53	122	69	165
PW9130i3000R-XL2U	3	9	18	45	34	84	53	122	69	165
Tower models										
PW9130L700T-XL	6	11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PW9130i700T-XL	6	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PW9130L1000T-XL	5	17	30	69	55	125	83	191	108	257
PW9130G1000T-XL	7	14	29	68	51	113	81	192	98	246
PW9130G1000T-XLEU	7	14	29	68	51	113	81	192	98	246
PW9130i1000T-XL	7	14	29	68	51	113	81	192	98	246
PW9130L1500T-XL	5	12	23	63	48	112	67	167	91	209
PW9130i1500T-XL	5	14	24	60	44	68	72	172	89	190
PW9130L2000T-XL	10	25	43	91	79	152	102	207	126	270
PW9130G2000T-XL	10	24	42	91	78	145	100	200	134	270
PW9130G2000T-XLEU	10	24	42	91	78	145	100	200	134	270
PW9130i2000T-XL	10	24	42	91	78	145	100	200	134	270
PW9130L3000T-XL	5	15	26	56	47	101	72	138	92	168
PW9130G3000T-XL	5	14	24	53	45	95	72	137	90	170
PW9130G3000T-XLEU	5	14	24	53	45	95	72	137	90	170
PW9130i3000T-XL	5	14	24	53	45	95	72	137	90	170

Maximum battery run-time for critical systems

Using LanSafe power management software, you can independently control load segments, which are groups of receptacles on the rear panel of the UPS. This feature enables you to manage scheduled shutdowns and sequential startups of protected loads. During a power outage, you could shut down power to non-critical devices, thereby extending battery backup time available for critical devices. You can also use this feature to remotely re-boot locked-up equipment.

Flexible deployment and communication options

One platform, two form factors, dozens of choices. Up to 3000 VA of UPS power is packed into only 2U of rack space. The tower option is about the size of a modern, compact PC, occupying only 1.5 square feet or less of footprint. Choose from dozens of models offering the input plug type and output receptacles that suit your needs and voltage.

Monitor and manage the UPS from anywhere. Connectivity options are available for almost any networking environment. The standard unit comes with USB and RS-232 serial communication ports. You can customize your UPS by adding BestDock interface options for other types of communications, such as to:

- Control and monitor UPS status and meters via SNMP or a Web browser

- Monitor and shut down multiple servers with different operating systems

- Send relay-contact alarm notifications to remote security systems

Intuitive, visual UPS monitoring and management

Local. An on-site user can configure and monitor many features of the 9130 using a large, bright, backlit display with easy navigation—available in multiple languages. LEDs provide at-a-glance insight into system status.

Remote. The 9130 comes complete with the LanSafe suite of power management software that provides control and visibility over all your UPS systems, using an intuitive, graphical interface and SNMP.
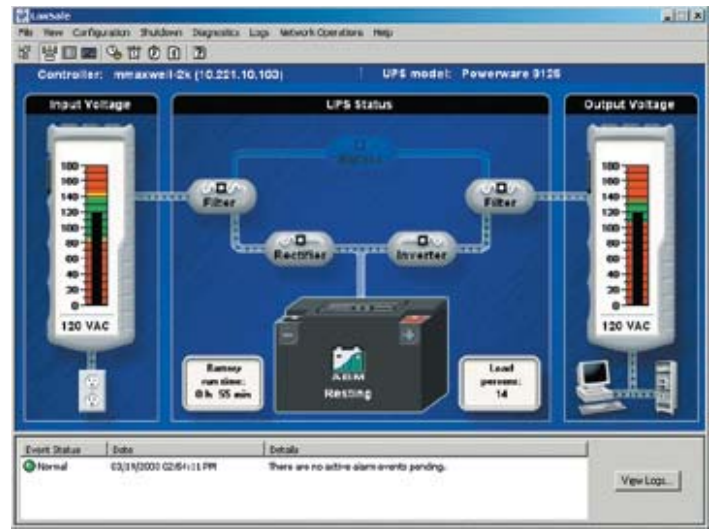
From a central vantage point, you have the visibility and control you need to ensure continuous up-time. For example, you can establish a prioritized shutdown of network devices and client/server applications, test all networked UPS systems from one node, analyze trends and network conditions, and stay informed of power problems by pager and email.

The LanSafe software package also includes multimedia demonstrations and a free trial for you to explore optional software for UPS performance monitoring/analysis and facility/data-center management.

Enhance your UPS with complementary options

Count on Eaton for comprehensive power quality and infrastructure solutions. You can complement your 9130 with options that create a more effective, manageable and resilient data center or facility. For example:

- A **maintenance bypass** enables power to completely bypass the UPS, so it can be safely serviced or replaced without powering down critical systems.

- Rugged and attractive **enclosures** provide well-organized rack space for data centers,

LanSafe answers network administrators' key questions with an intuitive visual display.

Is input voltage within the acceptable range?

If the power went out, how long could the UPS run on battery power?

Is the UPS running on battery power right now?

Are there any active events I need to know about?

Is the UPS online or in bypass mode?

Is output voltage within acceptable limits?

What percent of UPS capacity is being used right now?

Is the battery being charged or discharged?

wiring closets, office environments and warehouses.

- **Power distribution units** streamline the distribution of power throughout a data center, rack or enclosure.

- **Monitoring systems**, such as LanSafe, give you the insight to effectively manage the facility and its power infrastructure for maximum uptime.

- **Support services**, such as our eNotify remote monitoring, ensure that your power infrastructure is intelligently designed, continuously monitored and managed for always-on operations.

Eaton, your trusted ally for power quality

Representing more than 40 years of R&D excellence, the new Eaton 9130 UPS delivers more real *power*—so you can

power through any disruption and keep your organization's critical systems protected reliably and efficiently. Eaton will be there with you for the long term with premium warranty coverage and expert technical support.

When you want maximum peace of mind, count on Eaton's eNotify Remote Monitoring service. With this 7x24 service, our Customer Reliability Center (CRC) remotely monitors your UPS and contacts you in case of an emergency.

TOWER MODELS

Catalog number	Style number	Rating (VA/Watts)	Input connection	Output receptacles	Dimensions H x W x D, in (mm)	Weight, lb (kg)
North American Tower Models: 120V, 50/60 Hz						
PW9130L700T-XL	103006426-6591	700/630	5-15P	(6) 5-15R	9.1 x 6.3 x 13.8 (230 x 160 x 350)	26.9 (12.2)
PW9130L1000T-XL	103006427-6591	1000/900	5-15P	(6) 5-15R	9.1 x 6.3 x 15.0 (230 x 160 x 380)	32.0 (14.5)
PW9130L1500T-XL	103006428-6591	1500/1350	5-15P	(6) 5-15R	9.1 x 6.3 x 16.9 (230 x 160 x 430)	41.9 (19.0)
PW9130L2000T-XL	103006429-6591	2000/1800	5-20P	(1) L5-20, (4) 5-15/20R	12.8 x 8.4 x 16.1 (325 x 214 x 410)	76.1 (34.5)
PW9130L3000T-XL	103006430-6591	3000/2700	L5-30P	(4) 5-15/20R, (1) L5-30R	12.8 x 8.4 x 16.1 (325 x 214 x 410)	76.1 (34.5)
Global Tower Models: 208V, 50/60 Hz						
PW9130G1000T-XL	103006431-6591	1000/900	L6-20P*	(1) L6-20R, (2) 6-20R	9.1 x 6.3 x 15.0 (230 x 160 x 380)	32.0 (14.5)
PW9130G2000T-XL	103006432-6591	2000/1800	L6-20P*	(1) L6-20R, (4) 6-20R	12.8 x 8.4 x 16.1 (325 x 214 x 410)	76.1 (34.5)
PW9130G3000T-XL	103006446-6591	3000/2700	L6-20P**	(1) L6-30R, (1) L6-20R, (2) 6-20R	12.8 x 8.4 x 16.1 (325 x 214 x 410)	76.1 (34.5)
PW9130G1000T-XLEU	103006477-6591	1000/900	L6-20P*	(6) C13	9.1 x 6.3 x 15.0 (230 x 160 x 380)	32.0 (14.5)
PW9130G2000T-XLEU	103006478-6591	2000/1800	L6-20P*	(8) C13, (1) C19	12.8 x 8.4 x 16.1 (325 x 214 x 410)	76.1 (34.5)
PW9130G3000T-XLEU	103006479-6591	3000/2700	L6-20P**	(8) C13, (1) C19	12.8 x 8.4 x 16.1 (325 x 214 x 410)	76.1 (34.5)
International Tower Models: 230V, 50/60 Hz						
PW9130i700T-XL	103006433-6591	700/630	C14	(6) C13	9.1 x 6.3 x 13.8 (230 x 160 x 350)	26.9 (12.2)
PW9130i1000T-XL	103006434-6591	1000/900	C14	(6) C13	9.1 x 6.3 x 15.0 (230 x 160 x 380)	32.0 (14.5)
PW9130i1500T-XL	103006435-6591	1500/1350	C14	(6) C13	9.1 x 6.3 x 16.9 (230 x 160 x 430)	41.9 (19.0)
PW9130i2000T-XL	103006436-6591	2000/1800	C14	(8) C13, (1) C19	12.8 x 8.4 x 16.1 (325 x 214 x 410)	76.1 (34.5)
PW9130i3000T-XL	103006437-6591	3000/2700	C20	(8) C13, (1) C19	12.8 x 8.4 x 16.1 (325 x 214 x 410)	76.1 (34.5)
Tower Extended Battery Modules						
PW9130N1000T-EBM	103006438-6591	NA	NA	NA	9.1 x 6.3 x 15.0 (230 x 160 x 380)	40.8 (18.5)
PW9130N1500T-EBM	103006439-6591	NA	NA	NA	9.1 x 6.3 x 16.9 (230 x 160 x 430)	53.6 (24.3)
PW9130N3000T-EBM	103006440-6591	NA	NA	NA	12.8 x 8.4 x 16.1 (325 x 214 x 410)	110.3 (50.0)

RACK MODELS

Catalog number	Style number	Rating (VA/Watts)	Input connection	Output receptacles	Dimensions H x W x D, in (mm)	Weight, lb (kg)
North American Rack Models: 120V, 50/60 Hz						
PW9130L700R-XL2U	103006447-6591	700/630	5-15P	(6) 5-15R	3.4 x 17.2 x 17.7 (86.5 x 438 x 450)	49.4 (22.4)
PW9130L1000R-XL2U	103006448-6591	1000/900	5-15P	(6) 5-15R	3.4 x 17.2 x 17.7 (86.5 x 438 x 450)	49.4 (22.4)
PW9130L1500R-XL2U	103006449-6591	1500/1350	5-15P	(6) 5-15R	3.4 x 17.2 x 17.7 (86.5 x 438 x 450)	54.9 (24.9)
PW9130L2000R-XL2U	103006450-6591	2000/1800	5-20P	(6) 5-15/20R, (1) L5-20R	3.4 x 17.2 x 23.6 (86.5 x 438 x 600)	68.1 (30.9)
PW9130L2500R-XL2U	103006451-6591	2500/2250	L5-30P	(6) 5-15/20R, (1) L5-30R	3.4 x 17.2 x 23.6 (86.5 x 438 x 600)	69.2 (31.4)
PW9130L3000R-XL2U	103006452-6591	3000/2700	L5-30P	(6) 5-15/20R, (1) L5-30R	3.4 x 17.2 x 23.6 (86.5 x 438 x 600)	69.2 (31.4)
Global Rack Models: 208V, 50/60 Hz						
PW9130G1000R-XL2U	103006461-6591	1000/900	L6-20P*	(1) L6-20R, (2) 6-20R	3.4 x 17.2 x 17.7 (86.5 x 438 x 450)	49.4 (22.4)
PW9130G2000R-XL2U	103006462-6591	2000/1800	L6-20P*	(1) L6-20R, (4) 6-20R	3.4 x 17.2 x 23.6 (86.5 x 438 x 600)	54.9 (24.9)
PW9130G2500R-XL2U	103006453-6591	2500/2250	L6-20P**	(1) L6-30R, (1) L6-20R, (2) 6-20R	3.4 x 17.2 x 23.6 (86.5 x 438 x 600)	69.2 (31.4)
PW9130G3000R-XL2U	103006454-6591	3000/2700	L6-20P**	(1) L6-30R, (1) L6-20R, (2) 6-20R	3.4 x 17.2 x 23.6 (86.5 x 438 x 600)	69.2 (31.4)
PW9130G1000R-XL2UEU	103006480-6591	1000/900	L6-20P*	(6) C13	3.4 x 17.2 x 17.7 (86.5 x 438 x 450)	49.4 (22.4)
PW9130G2000R-XL2UEU	103006481-6591	2000/1800	L6-20P*	(8) C13, (1) C19	3.4 x 17.2 x 23.6 (86.5 x 438 x 600)	54.9 (24.9)
PW9130G2500R-XL2UEU	103006482-6591	2500/2250	L6-20P**	(8) C13, (1) C19	3.4 x 17.2 x 23.6 (86.5 x 438 x 600)	69.2 (31.4)
PW9130G3000R-XL2UEU	103006483-6591	3000/2700	L6-20P**	(8) C13, (1) C19	3.4 x 17.2 x 23.6 (86.5 x 438 x 600)	69.2 (31.4)
International Rack Models: 230V, 50/60 Hz						
PW9130i1000R-XL2U	103006455-6591	1000/900	C14	(6) C13	3.4 x 17.2 x 17.7 (86.5 x 438 x 450)	49.4 (22.4)
PW9130i1500R-XL2U	103006456-6591	1500/1350	C14	(6) C13	3.4 x 17.2 x 17.7 (86.5 x 438 x 450)	54.9 (24.9)
PW9130i2000R-XL2U	103006457-6591	2000/1800	C14	(8) C13, (1) C19	3.4 x 17.2 x 23.6 (86.5 x 438 x 600)	68.1 (30.9)
PW9130i3000R-XL2U	103006463-6591	3000/2700	C20	(8) C13, (1) C19	3.4 x 17.2 x 23.6 (86.5 x 438 x 600)	68.1 (30.9)
Rack Extended Battery Modules						
PW9130N1000R-EBM2U	103006458-6591	NA	NA	NA	3.4 x 17.2 x 17.7 (86.5 x 438 x 450)	62.0 (28.1)
PW9130N1500R-EBM2U	103006459-6591	NA	NA	NA	3.4 x 17.2 x 17.7 (86.5 x 438 x 450)	62.0 (28.1)
PW9130N3000R-EBM2U	103006460-6591	NA	NA	NA	3.4 x 17.2 x 23.6 (86.5 x 438 x 600)	84.0 (38.1)

*C14, w/ detach L6-20P
** C20, w/ detach L6-20P

Technical specifications

General

User interface	Graphical LCD with blue backlight and text in English, French, German, Russian and Spanish
LEDs	Four status-indicating LEDs
Topology	True online, double-conversion
Diagnostics	Full system self-test
UPS bypass	Automatic bypass
Dimensions	See models table
Rail kit	Included with all rackmount units

Electrical input

Nominal voltage	120V: 208–240V
Voltage range	120V: 90–138 Vac (with load PF of 0.7) 208/230V: 160–276 Vac (with load PF of 0.7)
Power draw of UPS	700: 5.8A @120V, 3.4A @208V, 3.0A @230V 1000: 8.3A @120V, 4.8A @208V, 4.3A @230V 1500: 12.5A @120V, 7.2A @208V, 6.5A @230V 2000: 16.6A @120V, 9.6A @208V, 8.7A @230V 2500: 20.8A @120V, 12.0A @208V, 10.9A @230V 3000: 25.0A @120V, 14.4A @208V, 13.0A @230V
Dedicated circuit breaker rating	**120V:** 700–1500 VA: 15A 2000 VA: 20A 2500–3000 VA: 30A **208/230V:** 700–2000 VA: 10A 3000 VA: 16A
Frequency	50/60 Hz
Frequency range	45–65 Hz

Electrical output

Power factor	0.9
On utility voltage regulation	±3% of nominal
On battery voltage regulation	±3% of nominal
Efficiency	>95% in high-efficiency mode; >86% in online mode
Frequency regulation	±3% Hz online
Load crest factor	3 to 1

Battery

Battery type	VRLA 12V/9 Ah (both internal and external)
Battery runtime	>3 minutes with internal batteries @100% load (0.7 PF)
Battery replacement	Hot-swappable internal and external batteries
Start-on-battery	Allows start of UPS without utility input

Communications

Serial port	RS-232 standard, for interface to power management software
USB port	HID standard, for communicating with Windows 98 and ME computers
Relay output	Common alarm standard
Communications slot	Optional communication slots (BD Slot)
Optional communication cards	SNMP/Web card for direct control and monitoring in SNMP-based networks, monitoring of UPS status and meters through Web browser interface Relay card for integration to industrial environment and building management systems, remote shutdown for IBM AS/400 systems

Environmental

Safety markings	120/208V: UL, CUL, VCCI 230V: CE, GS
EMC markings	120V: FCC Class B, EN55022 Class B (1.5 kVA and below); FCC Class A, EN55022 Class A (2.0 kVA and above) 230V: CE (per IEC/EN62040-2: Emissions, Category C1; Immunity, Category C2)
Audible noise	<50 dB
Ambient operating	0°C (32°F) to +40°C (104°F)
Storage temperature	-20°C (-4°F) to +40°C (104°F) with batteries and -25°C (-13°F) to +55°C (131 °F) without batteries
Relative humidity	5–90% non-condensing

Heat dissipation for all voltages: 230/208 and 120V

9130 model	Normal mode, BTUs/hr	On battery, BTUs/hr
700 VA	350	554
1000 VA	500	674
1500 VA	750	1,011
2000 VA	838	1,348
2500 VA	1,047	1,463
3000 VA	1,257	1,755