

Powerware series

Eaton 9140 UPS



Superior decentralized power protection for medium- and high-density rack environments

Features

- Protects mission-critical rackmount applications from downtime, data loss/corruption and process interruption by providing continuous, clean power with double-conversion topology
- Bundled with free power management software for maximizing uptime and ensuring data integrity, even in virtualized environments
- Conserves valuable rack space with up to 10 kVA of power in only 6U of height, including batteries
- Pre-installed rackmount hardware significantly reduces installation time
- Modular, lightweight design facilitates installation and improves service time
- Upgradable from 7.5 kVA to 10 kVA, to accommodate system growth
- Blade-server compatible with standard IEC receptacles
- ABM® technology significantly increases battery life, resulting in more uptime and fewer battery replacements

This double-conversion UPS resolves all nine common utility power problems and supplies clean, continuous power to all connected equipment. If utility power goes out all together, there is no delay transferring to backup power, either to UPS batteries or an auxiliary generator.

Product snapshot

Power rating:	10 kVA/8 kW and 7.5 kVA/6 kW Single-phase in/single-phase out Three-phase in/single-phase out (manually selectable in HW version)
Nominal input voltage:	1/1: 230 Vac (200–240 Vac) 3/1: 400/230 Vac
Nominal output voltage:	208 or 230 Vac auto-sensing (200–240 Vac) 120V output voltage available with transformer
Frequency:	50/60 Hz (auto-sensing)
Configuration:	Double-conversion 6U rackmount, including batteries
Dimensions:	10.5" H (6U) x 17" W x 31.1" D 263 mm x 430 mm x 790 mm



Powering Business Worldwide

Introducing the 9140



The 9140 and one EBM occupy only 9U of rack space.

Easily install and service your UPS

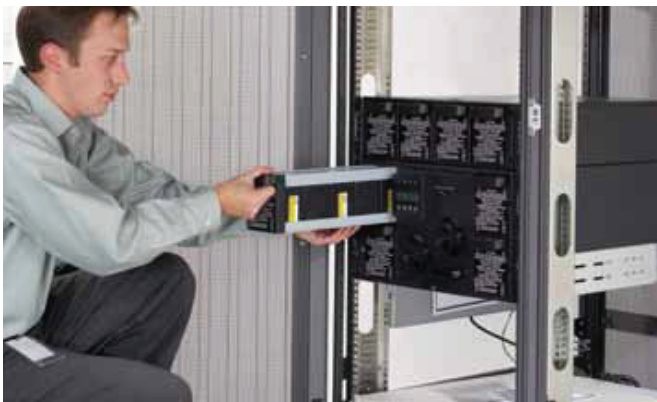
The 9140 delivers high system availability—the key is an internal automatic bypass feature that allows the 9140 to continuously provide power to critical equipment while the system is serviced, even when the electronics are removed.

The 9140 also comes with user-replaceable battery and power modules. Both of these are easy for one person to switch out without disrupting power to protected equipment.

If your computer room is dynamic and you find yourself frequently moving racks and other IT equipment, you may prefer a 9140 corded UPS, which is equipped with a standard IEC 309-60A cord with plug as input, which means you don't need an electrician to install your UPS with each move.

Optimize battery runtime

Standard internal batteries provide ride-through power until auxiliary power takes over or systems are gracefully shut down. Eaton's unique ABM battery charging technology significantly extends battery service life while optimizing the battery recharge time and giving you up to 50 percent more battery life. For greater runtime, you can add up to four extended battery modules (EBMs). Depending on your load, this could give you hours of runtime.



Modular, lightweight design allows for easy installation and service.

Streamline operations with complete rackmount solutions from Eaton

Our line of rackmount Eaton power distribution units (PDUs) distributes conditioned UPS power throughout one or more racks—simply, elegantly and inexpensively. We offer multiple PDU models that can be connected to the output of the 9140, and distribute 200–240V power throughout your rack. Additionally, small step-down transformer options deliver 120V output to power communications, monitoring and other peripheral equipment.

Stay continually informed of UPS status

For local monitoring, UPSs in this class offer only status indicators. The 9140 features both LEDs and an intuitive, multilingual LCD on the front of the unit. The LCD relays more in-depth operational information, communicates specific alarms and predictive service needs, and can be used to program certain features.

The 9140 constantly monitors its own operation and sends alarms or takes action if it detects a potential problem. If it senses an issue—planned or unplanned—the UPS instantly transfers to battery or bypass source, and back to normal when the alarm condition passes, with no interruption in power.

Expanding UPS management capabilities

Getting even more protection for your network is easy to do. If you install a communication card in your 9140, you can easily integrate Eaton's free Intelligent Power® Software Suite. This allows you to monitor and manage the power devices on your network from a single interface, giving you up-to-the-minute information on the status of power in your network. The Intelligent Power Software Suite:

- Provides critical information, such as UPS battery condition, load levels and battery runtime
- Seamlessly integrates with VMware® vCenter Server™ dashboard
- Triggers migration applications to move virtual machines during a power failure
- Gracefully shuts down computers and virtual machines/servers during an extended power outage
- Work with VMware, Microsoft®, Citrix® and Red Hat® virtualization platforms

To learn more, please visit: www.eaton.com/intelligentpower

Step-down Transformer option

The 9140 Transformer delivers isolated step-down conversion for 120/208/240V AC outputs and provides maximum flexibility, regardless your power source. Available with 7.5 and 10 kVA options, this unit will convert your incoming power from 208/240V down to 120V effortlessly.



9140 Step-down Transformer option

9140 products and services

Model	Part number	Input connection	Output connections	Dimensions (H x W x D, inches)	Weight (lb)
200–240 Vac in (single-phase)/200–240 Vac out User selectable 380–415 Vac in (three-phase)/220–240 Vac out (single-phase) for hardwire models					
PW9140 7500 HW	103005093-6591	Hardwired	Hardwired (3) C19 & (2) C13	10.5 (6U) x 17.2 x 31.1	254
PW9140 10000 HW	103004728-6591	Hardwired	Hardwired (3) C19 & (2) C13	10.5 (6U) x 17.2 x 31.1	254
PW9140 7500	103005094-6591	IEC 309-60A cord	IEC 309-60A cord, (4) C19	10.5 (6U) x 17.2 x 31.1	265
PW9140 10000	103004727-6591	IEC 309-60A cord	IEC 309-60A cord, (4) C19	10.5 (6U) x 17.2 x 31.1	265

9140 Extended Battery Modules

PW9140 3U EBM ¹	103004729-6591			5.25 (3U) x 17.2 x 26.0	175
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Step-Down Transformer

Catalog Number	Part number	Output connections	Dimensions (H x W x D, inches)	Weight (lb)
EXRTL9140-XFMR3U	103007853-6591	(2)L6-30R, (8) 5-15/20R	5.14 x 17.5 x 22.3	190

1. Up to four EBMs can be connected to a single 9140

9140 connectivity options

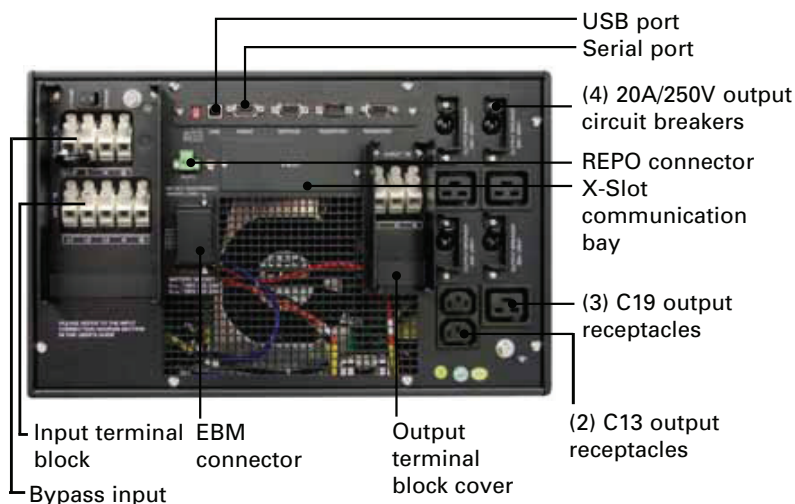
Part number	Description
116750221-001	ConnectUPS-X Web/SNMP card
103005425-5591	Modbus card
1018460	Relay card (AS/400 compatible)
103003055	Industrial relay card
116750224-001	Environmental Monitoring Probe (EMP) (requires ConnectUPS Web/SNMP X-Slot card)

9140 runtimes (in minutes)

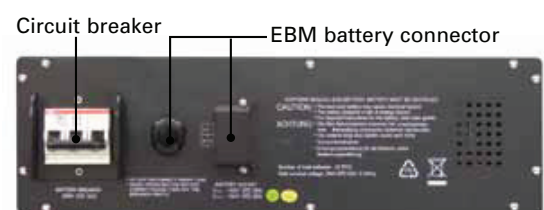
VA	Watts	UPS Internal Batteries	+1 EBM	+2 EBMs	+3 EBMs	+4 EBMs
1250	1000	80	137	189	275	365
2500	2000	31	61	99	138	181
3750	3000	18	38	68	92	121
5000	4000	12	27	52	69	90
6250	5000	9	21	42	55	72
7500	6000	7	17	35	46	60
8750	7000	6	14	31	40	51
10,000	8000	5	12	27	35	45

9140 hardwire

9140 (rear view)



9140 EBM (rear view)



9140 technical specifications

Power

Ratings	10 kVA/8 kW for 208–240V nominal voltage 9 kVA/7.2 kW for 200V 7.5 kVA/6 kW
Topology	True double-conversion UPS

Electrical input

Nominal input voltage

Single-phase	200–208V (for 200–208V nominal output); 220–240V
Three-phase	380/220V, 400/230V, 415/240V

Input voltage range

Single-phase	160–253V (for 200–208V nominal output); 174–288V (for 220–240V nominal output)
Three-phase	301–499V/174–288V
Operating frequency	45–55 Hz range for 50 Hz nominal; 55–65 Hz range for 60 Hz nominal
Input power factor	>0.99
Input current distortion	<5% THD

Electrical output

Single-phase	120 output voltage available with transformer 200V/208V/220V/230V/240V user-selectable
Output voltage regulation	±2% static, ±10% dynamic
Efficiency	>90%
Output frequency	Automatic selection of 50 Hz nominal (±3.5 Hz) and 60 Hz nominal (±3.5 Hz)
Battery type	12V, 5 Ah, sealed, lead-acid, maintenance-free
Battery runtime	See battery runtime chart
Battery replacement	Modular, hot-swappable, user-replaceable
Charger	2.5A charger to support up to four additional EBMs
Start-on-battery	Allows startup of UPS without utility input

Communications

LCD	Multilingual graphical LCD with backlight
LEDs	(4) LEDs for notice and alarm
Communication ports	(1) USB, (1) RS-232 serial, (1) REPO
Communication slot	(1) X-Slot communication bay
Power management software	Bundled Intelligent Power Software Suite CD, 9140 is HID-compliant

General

Dimensions	H x W x D, in/mm
PW9140 UPS	10.5 (6U) x 17 x 31.1/263 x 430 x 790
PW9140 EBM	5.25 (3U) x 17 x 26/131 x 430 x 660
Weight	
PW9140 UPS	254 lb
PW9140 EBM	175 lb
Battery module	37 lb
Power module	40 lb
UPS bypass	Automatic on overload, overtemp, UPS failure or removal of power module
Overload to bypass	±10% of 112 to 130% for 60 seconds, transfer

Environmental

RoHS compliance	EU RoHS/WEEE compliant
Operating temperature	0°C to 40°C (32°F to 104°F)
Transit and storage temperature	-20°C to +50°C (-4°F to 122°F)
Relative humidity	0–95% non-condensing
Audible noise	<55 dBA at 5 feet
Altitude	Operating 3000m, transit 15000m

Certifications

Safety certifications	UL, cULus, NOM, TUV, CE
EMC compliance markings	FCC, CE, VCCI, C-Tick

Step-Down Transformer Options

9140 75/10kVA Transformer with rails
Catalog Number: EXRTL9140-XFMR3U
Input Voltage: 208-240 Vac
Output Voltage: 120/208/240 Vac