

# Eaton 9130 Rackmount UPS



## Product snapshot

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|                        |                         |
|------------------------|-------------------------|
| <b>Product rating:</b> | 700–3000 VA             |
| <b>Voltage</b>         | 120 Vac, 208–240V       |
| <b>Frequency:</b>      | 50/60 Hz (auto-sensing) |
| <b>Configuration:</b>  | Rackmount               |

### Advanced power protection for:

- IT and networking environments
- Rack 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*

## Features

- Protects against downtime, data loss and process interruption by providing continuous, clean power
- Graphical user interface provides all critical UPS information on a single screen and enables settings control at the push of a button
- Provides up to 3000 VA in only 2U of rack space
- Offers premium performance with a 0.9 power factor and >95 percent efficiency in high efficiency mode
- 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
- Ensures data and system integrity with Intelligent Power® Manager supervisory software, which provides easy, versatile, remote monitoring and management of multiple devices
- Provides a two-year limited warranty, an extended warranty, on-site Flex and on-site PowerTrust service contracts, and a \$250,000 load protection guarantee (U.S. and Canada)

## Maximum availability

- ABM technology increases battery life and system uptime
- Load segments allow for selective load shedding during outages
- Optional 2U, hot-swappable extended battery modules (EBMs) extend backup runtime for hours
- Internal hot-swappable batteries can be replaced without powering down the UPS
- UPS startup on battery power
- HotSwap Maintenance Bypass (MBP) and PowerPass Distribution Modules (PPDMs) options enable the entire UPS to be serviced or replaced without powering down critical systems

## Low total cost of ownership

- More real output power for dollar spent with 0.9 power factor
- Cuts energy usage and costs with >95% efficiency rating in high efficiency mode
- 3000 VA in only 2U of space saves expensive data center real estate



Hot-swappable internal batteries in only 2U



Add up to four EBMs for hours of runtime

### Intelligent Power Software Suite

By integrating the suite with the Eaton 9130, you can:

- Seamlessly integrate with VMware's vCenter Server™ virtualization management solution, as well as virtualization platforms such as Citrix® XenServer, Microsoft SCVMM™, Red Hat® and other Xen® open source platforms
- Initiate live migration of virtual machines (VM) to automatically and transparently migrate VMs during power disruptions to unaffected devices with systems such as VMware vMotion™ and Microsoft Live Migration
- Integrate with VMware vCenter Site Recovery Manager

To learn more, please visit: [Eaton.com/intelligentpower](http://Eaton.com/intelligentpower)

### UPS status and operation

- Bright front panel LCD for easy monitoring and management
- LEDs to show system status
- Optional FlexPDU adds more plug-and-play flexibility, streamlining power distribution
- Multiple options for industry-standard communications
- Intelligent Power Manager supervisory software included free of charge
- Direct monitoring via existing management systems and LANs

### Communications

- A standard communication slot accepts interfaces for Web, SNMP, Modbus or serial connectivity
- Connect directly to the Ethernet network and the Internet to monitor and manage the UPS with a standard Web browser
- Monitor power conditions in real time through existing facilities or building management system
- Monitor and gracefully shut down multiple servers running various operating systems
- Receive alarm notifications from the UPS, environmental monitoring devices or security systems



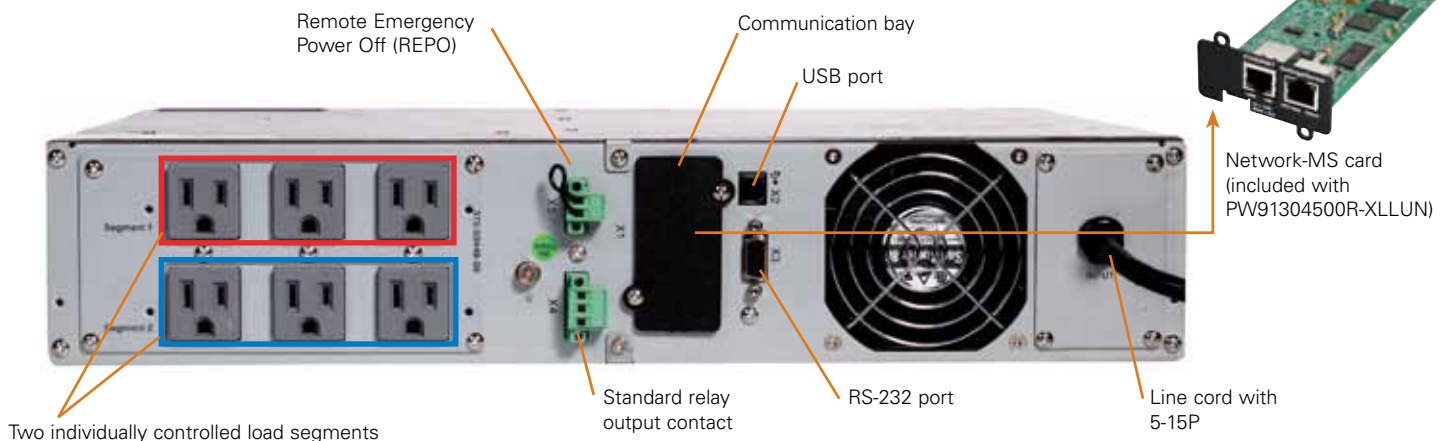
Optional FlexPDU and HotSwap MBP for greater flexibility and uptime

Four-post rail kit included (two-post rail kit optional)



Microsoft Partner Network

### UPS rear panel (PW9130L1500R-XL2U)



## 9130 models

| Catalog number                               | Style number   | Rating<br>(VA/Watts) | Input<br>connection <sup>1</sup> | Output receptacles                | Dimensions<br>H x W x D, in | Weight, lb |
|----------------------------------------------|----------------|----------------------|----------------------------------|-----------------------------------|-----------------------------|------------|
| <b>North American models: 120V, 50/60 Hz</b> |                |                      |                                  |                                   |                             |            |
| PW9130L700R-XL2U                             | 103006447-6591 | 700/630              | 5-15P                            | (6) 5-15R                         | 3.4 x 17.2 x 17.7           | 35.3       |
| PW9130L1000R-XL2U                            | 103006448-6591 | 1000/900             | 5-15P                            | (6) 5-15R                         | 3.4 x 17.2 x 17.7           | 35.3       |
| PW9130L1500R-XL2U                            | 103006449-6591 | 1500/1350            | 5-15P                            | (6) 5-15R                         | 3.4 x 17.2 x 17.7           | 43.0       |
| PW9130L2000R-XL2U                            | 103006450-6591 | 2000/1800            | 5-20P                            | (6) 5-20R, (1) L5-20R             | 3.4 x 17.2 x 23.6           | 63.9       |
| PW9130L2500R-XL2U                            | 103006451-6591 | 2500/2250            | L5-30P                           | (6) 5-20R, (1) L5-30R             | 3.4 x 17.2 x 23.6           | 65.0       |
| PW9130L3000R-XL2U                            | 103006452-6591 | 3000/2700            | L5-30P                           | (6) 5-20R, (1) L5-30R             | 3.4 x 17.2 x 23.6           | 65.0       |
| PW9130L1500R-XL2UN                           |                | 1500 / 1350          | 5-15P                            | (6) 5-15R                         | 3.4 (2U) x 17.3 x 16.9      | 43.0       |
| PW9130L2000R-XL2UN                           |                | 2000 / 1800          | 5-20P                            | (6) 5-20R, (1) L5-20R             | 3.4 (2U) x 17.3 x 22.6      | 63.9       |
| PW9130L3000R-XL2UN                           |                | 3000 / 2700          | L5-30P                           | (6) 5-20R, (1) L5-30R             | 3.4 (2U) x 17.3 x 22.6      | 65.0       |
| <b>Global models: 208V, 50/60 Hz</b>         |                |                      |                                  |                                   |                             |            |
| PW9130G3000R-XL2U                            | 103006454-6591 | 3000/2700            | L6-20P <sup>4</sup>              | (1) L6-30R, (1) L6-20R, (2) 6-20R | 3.4 x 17.2 x 23.6           | 65.0       |
| PW9130G3000R-XL2UEU                          | 103006483-6591 | 3000/2700            | L6-20P <sup>4</sup>              | (8) C13, (1) C19                  | 3.4 x 17.2 x 23.6           | 65.0       |
| <b>International models: 230V, 50/60 Hz</b>  |                |                      |                                  |                                   |                             |            |
| PW9130i1000R-XL2U                            | 103006455-6591 | 1000/900             | C14                              | (6) C13                           | 3.4 x 17.2 x 17.7           | 35.3       |
| PW9130i1500R-XL2U                            | 103006456-6591 | 1500/1350            | C14                              | (6) C13                           | 3.4 x 17.2 x 17.7           | 43.0       |
| PW9130i2000R-XL2U                            | 103006457-6591 | 2000/1800            | C14                              | (8) C13, (1) C19                  | 3.4 x 17.2 x 23.6           | 63.9       |
| PW9130i3000R-XL2U                            | 103006463-6591 | 3000/2700            | C20                              | (8) C13, (1) C19                  | 3.4 x 17.2 x 23.6           | 65.0       |
| <b>Extended battery modules</b>              |                |                      |                                  |                                   |                             |            |
| PW9130N1000R-EBM2U5                          | 103006458-6591 | NA                   | NA                               | NA                                | 3.4 x 17.2 x 17.7           | 48.7       |
| PW9130N1500R-EBM2U6                          | 103006459-6591 | NA                   | NA                               | NA                                | 3.4 x 17.2 x 17.7           | 62.0       |
| PW9130N3000R-EBM2U7                          | 103006460-6591 | NA                   | NA                               | NA                                | 3.4 x 17.2 x 23.6           | 90.6       |

**TAA Compliant SKUS** Eaton now offers TAA compliant models for the 9130. Please visit [Eaton.com/taaup](http://Eaton.com/taaup) for model specific information.

| Catalog number                        | Description                 | Input connection | Output receptacles      | Dimensions H x W x D, in | Weight, lb |
|---------------------------------------|-----------------------------|------------------|-------------------------|--------------------------|------------|
| <b>PowerPass Distribution Modules</b> |                             |                  |                         |                          |            |
| 103002730-6501                        | PPDM1-HV-US-P2 3 kVA        | IEC320-C208      | (1) L5-30R & (6) 5-20R  | 3.5 (2U) x 17.0 x 23.9   | 20.0       |
| 103002732-6591                        | PPDM1-HV-US-HW 3 kVA (ROHS) | Hardwire         | Hardwire                | 3.5 (2U) x 17.0 x 23.9   | 20.0       |
| 103002735-6591                        | PPDM2-LV-US-HW 3 kVA (ROHS) | Hardwire         | Hardwire                | 3.5 (2U) x 17.0 x 23.9   | 20.0       |
| 103002739-6591                        | PPDM1-HV-US-P1 3 kVA (ROHS) | IEC320-C208      | (1) L14-30R & (6) 5-20R | 3.5 (2U) x 17.0 x 23.9   | 20.0       |
| 103002742-6501                        | PPDM2-LV-US-P1 3 kVA        | L5-30P8          | (1) L5-30R & (6) 5-20R  | 3.5 (2U) x 17.0 x 23.9   | 20.0       |

1. Input cord length is 6 ft. 2. Rack models occupy 2U of rack space and fit into 19-inch racks. 3. C14, w/detachable L6-20P. 4. C20, w/detachable L6-20P. 5. This EBM works with 700/1000 VA models, where available. 6. This EBM works with 1500 VA model. 7. This EBM works with 2000/2500/3000 VA models, where available. 8. Connection cables to the UPS are included with the PPDM; use the input cord from the UPS as input to the PPDM, except for hardwire units. **Additional notes:** When high voltage 9130 is used at 208V, derate power by 10% and 20% at 200V. When low voltage 9130 is used at 110V, derate power by 10% and 20% at 100V.

### Battery runtimes (in minutes)

| Load<br>(VA/Watts)       | Internal<br>batteries | w/1 EBM | w/2 EBMs | w/3 EBMs | w/4 EBMs | Load<br>(VA/Watts)                                                 | Internal<br>batteries | w/1 EBM | w/2 EBMs | w/3 EBMs | w/4 EBMs |
|--------------------------|-----------------------|---------|----------|----------|----------|--------------------------------------------------------------------|-----------------------|---------|----------|----------|----------|
| <b>PW9130L700R-XL2U</b>  |                       |         |          |          |          | <b>PW9130L2000R-XL2U</b>                                           |                       |         |          |          |          |
| 700/490                  | 14                    | 55      | 102      | 148      | 175      | 2000/1400                                                          | 9                     | 45      | 86       | 124      | 163      |
| 525/368                  | 20                    | 77      | 140      | 179      | 239      | 1500/1050                                                          | 14                    | 66      | 115      | 165      | 225      |
| 350/245                  | 32                    | 124     | 189      | 282      | 414      | 1000/700                                                           | 26                    | 101     | 185      | 251      | 343      |
| 175/123                  | 64                    | 200     | 395      | 552      | 739      | 500/350                                                            | 52                    | 197     | 353      | 481      | 629      |
| <b>PW9130L1000R-XL2U</b> |                       |         |          |          |          | <b>PW9130L2500R-XL2U</b>                                           |                       |         |          |          |          |
| 1000/700                 | 10                    | 40      | 73       | 108      | 149      | 2500/2250                                                          | 7                     | 31      | 59       | 87       | 119      |
| 750/525                  | 13                    | 58      | 101      | 152      | 219      | 1875/1688                                                          | 10                    | 43      | 81       | 121      | 154      |
| 500/350                  | 24                    | 85      | 172      | 249      | 304      | 1250/1125                                                          | 17                    | 65      | 120      | 163      | 203      |
| 250/175                  | 48                    | 190     | 310      | 451      | 569      | 625/563                                                            | 40                    | 145     | 228      | 363      | 491      |
| <b>PW9130L1500R-XL2U</b> |                       |         |          |          |          | <b>PW9130L3000R-XL2U</b>                                           |                       |         |          |          |          |
| 1500/1050                | 7                     | 34      | 63       | 88       | 135      | 3000/2100                                                          | 5                     | 25      | 48       | 72       | 100      |
| 1125/788                 | 11                    | 44      | 84       | 129      | 210      | 2250/1575                                                          | 8                     | 37      | 72       | 102      | 137      |
| 750/525                  | 18                    | 79      | 148      | 207      | 267      | 1500/1050                                                          | 13                    | 60      | 100      | 165      | 223      |
| 375/263                  | 38                    | 167     | 278      | 475      | 540      | 750/525                                                            | 34                    | 138     | 228      | 326      | 438      |
| <b>PW9130i1500R-XL2U</b> |                       |         |          |          |          | <b>PW9130G3000R-XL2U / PW9130G3000R-XL2UEU / PW9130i3000R-XL2U</b> |                       |         |          |          |          |
| 1500/1050                | 7                     | 32      | 61       | 98       | 128      | 3000/2100                                                          | 6                     | 25      | 45       | 68       | 96       |
| 1125/788                 | 11                    | 47      | 83       | 126      | 195      | 2250/1575                                                          | 8                     | 34      | 70       | 96       | 130      |
| 750/525                  | 18                    | 81      | 143      | 208      | 262      | 1500/1050                                                          | 14                    | 62      | 92       | 156      | 211      |
| 375/263                  | 38                    | 171     | 298      | 416      | 564      | 750/525                                                            | 34                    | 130     | 212      | 355      | 442      |

#### Battery runtime

You can get up to five hours of battery runtime using the internal batteries and extended battery modules. For a detailed, interactive battery runtime chart, please visit: [Eaton.com/9130](http://Eaton.com/9130).

**Notes:** Backup times are approximate and may vary with equipment, configuration, battery age, temperature, etc. Runtimes are shown at a 0.7 power factor.

# Technical specifications<sup>1</sup>

## 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 on previous page                                                          |
| Rail kit                          | 4-post rail kit included with all rackmount units                                          |
| EBMs                              | Ship with a 4-post rail kit                                                                |
| Remote Emergency Power-off (REPO) | Emergency shutdown control                                                                 |

## Electrical input

|                                  |                                                                                                                                                                                                                                                   |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nominal voltage                  | 120V, 208V, 220–240V                                                                                                                                                                                                                              |
| Voltage range                    | 120V: 90–138 Vac<br>208/230V: 160–276 Vac                                                                                                                                                                                                         |
| Power draw of UPS                | 700: 5.8A @120V, 3.4A @208V, 3.0A @230V<br>1000: 8.3A @120V, 4.8A @208V, 4.3A @230V<br>1500: 12.5A @120V, 7.2A @208V, 6.5A @230V<br>2000: 16.6A @120V, 9.6A @208V, 8.7A @230V<br>2500: 20.8A @208V, 10.9A @230V<br>3000: 14.4A @208V, 13.0A @230V |
| Dedicated circuit breaker rating | <b>120V:</b><br>700–1500 VA: 15A<br>2000 VA: 20A<br>2500–3000 VA: 30A<br><b>208/230V:</b><br>700–2000 VA: 10A<br>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                                                |
| Voltage waveform              | Sine wave                                             |
| Load segments                 | Two configurable, individually controlled receptacles |

## Battery

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

### Comprehensive Eaton services available for 9130 Rack products

- Warranty+ extended warranties—3 or 5 years total
- On-site service plans for startups and preventive and corrective maintenance

Visit **Eaton.com/9130RM** for details.

## Communications

|                              |                                                                                                                                                                                                                                                                        |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Serial port                  | RS-232 standard, for interface to power management software                                                                                                                                                                                                            |
| USB port                     | HID standard, for communicating with Windows 98, XP, ME and Vista computers                                                                                                                                                                                            |
| Relay output                 | Common alarm standard                                                                                                                                                                                                                                                  |
| Communications slot          | Optional communication slots (BD Slot, Mini-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<br>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)<br>230V: CE (per IEC/EN62040-2: Emissions, Category C1; Immunity, Category C2) |
| Audible noise                 | <50 dB                                                                                                                                                                                  |
| Ambient operating temperature | 0°C (32°F) to +40°C (104°F)                                                                                                                                                             |
| Storage temperature           | -20°C (-4°F) to +40°C (104°F) with batteries and<br>-25°C (-13°F) to +55°C (131 °F) without batteries                                                                                   |
| Relative humidity             | 5–90% non-condensing                                                                                                                                                                    |

### Heat dissipation for all voltages: 208–240V and 120V

| Normal Mode                                                                                                                                     | Battery Mode                                                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 700 VA: 350 BTUs/hr<br>1000 VA: 500 BTUs/hr<br>1500 VA: 750 BTUs/hr<br>2000 VA: 838 BTUs/hr<br>2500 VA: 1,047 BTUs/hr<br>3000 VA: 1,257 BTUs/hr | 700 VA: 554 BTUs/hr<br>1000 VA: 674 BTUs/hr<br>1500 VA: 1,011 BTUs/hr<br>2000 VA: 1,348 BTUs/hr<br>2500 VA: 1,463 BTUs/hr<br>3000 VA: 1,755 BTUs/hr |

<sup>1</sup> Due to continuing product improvement programs, specifications are subject to change without notice.

The 9130 is part of the UPSgrade program

**UPSgrade™**

Eaton.com/UPSgrade

### What's in the box

- Tower pedestals
- Four-post rail kit
- User manual CD
- Intelligent Power Software Suite CD
- Quick start guide
- USB cable
- RS-232 serial cable
- Phillips Head screw driver
- 2 IEC to IEC jumper cables (208V/230V models)

For more information about the 9130, visit **Eaton.com/9130RM**.



Powering Business Worldwide

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