

# Eaton EX

700/1000/1500/2200/3000 VA



Eaton EX 1500



Eaton EX Rack/Tower versatility

#### Ideal protection for:

- Servers, data storage and network equipment
- Telephony - VoIP
- Medical equipment - Industrial processes



#### Double conversion (on-line)

##### Maximum availability

- **Topology:** double conversion on-line UPS with automatic by-pass and power factor correction
- **Powershare:** the Eaton EX output sockets are individually controlled to provide load-shedding to maximise the backup time and provide remote reboot and sequential start-up as standard
- **Continuous power supply:** Hot swappable batteries. The HotSwap MBP (Maintenance By-Pass) module allows the UPS to be replaced without interrupting the power supply
- **Long backup times:** 1 to 4 EXB battery units can be added to the Eaton EX. The Eaton EX 3000XL has a built-in super charger for extra long backup times

##### Minimum total cost of ownership

- **Easy operation:** the LCD gives you access to a wide range of measurements and set-up menus
- **Remote supervision:** the Eaton software suite offers a wide range of communication option including: SNMP and HTML, ModBus/JBus and relay outputs

##### Total flexibility

Eaton EX has unmatched Flexibility.

- **Format:** EX 700 to 1500 are available in tower format or RT2U convertible rack/tower format (compatible with short-depth rack). EX 2200 & 3000 are available in RT2U format (optimised for rack mounting) or RT3U (for tower or short-depth racks)
- **Connections:** with FlexPDU and HotSwap MBP, the RT2U and RT3U models can be connected by sockets or terminal blocks. They can be installed as required, on the side or on top of the unit
- **Compatible with high power factor loads:** Eaton EX is rated for 0.9 power factor (700 VA/630 W, 1000 VA/900 W, 1500 VA/1350 W, 2200 VA/1980 W and 3000 VA/2700 W)
- **Communication:** the EX includes both serial and USB ports, plus remote On/Off connector and an extra slot for optional communication cards. The UPS comes with a complete Eaton software suite.



Powering Business Worldwide

# Eaton EX UPS

- 1 LCD Multilingual display
  - 6 languages,
  - displays measurements,
  - displays alarms,
  - access to control and set-up menus.
- 2 Panel for batteries replacement (Hot swappable)



Eaton EX 3000

- 3 1 USB port + 1 serial port + remote ON/OFF and emergency stop inputs.
- 4 EXB battery unit connector.
- 5 EXB units recognised automatically.
- 6 8 IEC 10A sockets, including 4 Powershare programmable sockets and 1 IEC 16A socket.
- 7 Communication card slot.
- 8 Mountings for HotSwap MBP and FlexPDU.

TECHNICAL SPECIFICATIONS	700	1000 - 1000 RT2U	1500 - 1500 RT2U	2200	3000 - 3000 XL
Rating (VA/W)	700 VA / 630 W	1000 VA / 900 W (1)	1500 VA / 1350 W (1)	2200 VA / 1980 W	3000 VA / 2700 W (1)
Format	Mini tower	Mini tower or RT2U (tower/rack 2U)		RT2U (tower/rack 2U) and RT3U (tower/rack 3U)	
<b>Electrical characteristics</b>					
Architecture	On-line double conversion with automatic by-pass and power factor correction				
Input voltage and frequency ranges without using batteries	100/120/140/160 V to 284V - 40 to 70 Hz for load level <20% / <33% / <66% / >=66% of rated output			100/120/160/184 V to 284V - 40 to 70 Hz for load level <20% / <33% / <66% / >=66% of rated output	
Output voltage and frequency	230 V (adjustable to 200/208/220/240/250 V), 50/60 Hz auto-select or frequency converter mode (2)			230 V (adjustable to 200/208/220/240 V), 50/60 Hz auto-select or frequency converter mode	
<b>Connections</b>					
Input	1 IEC C14 (10A) socket			1 IEC C20 (16A) or terminal block on HotSwap MBP HW (Hard-Wired)	
Outputs	6 IEC C13 (10A) sockets			8 IEC C13 (10A) sockets + 1 IEC C19 (16A) socket	
Remotely controlled Powershare sockets	2 independent groups: 2 + 1 IEC C13 (10A) sockets			2 groups of 2 x IEC C13 (10A) on Eaton EX	
Additional outputs with HotSwap MBP FR/DIN/BS/IEC/HW	4 FR/Schuko sockets or 3 BS sockets or 6 IEC 10A sockets or terminal blocks (HW version)				
Additional outputs with FlexPDU FR/DIN/BS/IEC	8 FR/Schuko sockets or 6 BS sockets or 12 IEC 10A sockets				
<b>Battery</b>					
Typical backup times for 50 and 70% load (5) except for Eaton EX 3000 XL (4)					
EX	16 min / 10 min	18 min / 12 min	13 min / 9 min	17 min / 12 min	15 min / 10 min
EX + 1 EXB	/	75 min / 50 min	50 min / 35 min	85 min / 60 min	60 min / 40 min
EX + 4 EXB	/	250 min / 200 min	180 min / 120 min	285 min / 200 min	190 min / 150 min
Battery management	Automatic weekly test (period adjustable using LCD display or in software supplied), automatic recognition of external battery units => continuous maximisation of backup time + deep discharge protection				
<b>Interfaces</b>					
Indicators and display	3 LEDs + adjustable multilingual display: display of measurements, access to control and set-up menus				
Communication ports	1 USB port + 1 RS232 serial port and relay contacts (3) + 1 mini terminal block for remote ON/OFF and emergency stop				
Communications card slots	1 slot for NMC Minislot card (included in Netpack version) or NMC ModBus/JBus or MC Contacts/Serial				
<b>Operating conditions, standards and approvals</b>					
Operating temperature noise level	0°C to 40°C continuous, 45 dBA				
Performance - Safety - EMC	IEC/EN 62 040-1, IEC/EN 62 040-2, IEC/EN 62 040-3 (VFI-SS-113), IEC/EN 60 950-1 (RD)				
Approvals	CE, TÜV GS, CB report, cTÜV-US			CE, TÜV, CB Report, UL CE, TÜV, CB Report, UL	
<b>Dimensions (H x W x D) / Weight</b>					
EX	242 x 153 x 440 mm / 12.5 kg	242 x 153 x 440 mm / 15 kg	242 x 153 x 490 mm / 18 kg	440 x 131 x 490 mm (6) / 30 kg (3000 XL = 18 kg)	
EX (RT2U format)	/	86.5 x 438 x 483 mm / 18 kg	86.5 x 438 x 483 mm / 20.5 kg	86 x 440 x 640 mm / 31 kg	
EX EXB	/	242 x 153 x 440 mm / 21 kg		440 x 131 x 490 mm (6)	
EX EXB (RT2U format)	/	86.5 x 438 x 483 mm / 24.5 kg		/	
<b>Customer Service &amp; Support</b>					
2 years warranty	Standard product exchange, including the battery				
Warranty+	Optional 3-years warranty (depending on the country please visit <a href="http://www.eaton.com/powerquality">www.eaton.com/powerquality</a> )				
1: Maximum rating with EXB battery units: Eaton EX 1000 = 800 W, Eaton EX 1500 = 1200 W and Eaton EX 3000=2400W. 2: Derated by 15% when used as a frequency converter. 3: USB and RS232 serial ports cannot be used simultaneously. 4: Except Eaton EX 3000 XL: UPS with high speed charger, without built-in batteries, for custom configurations: ask us for details. 5: Runtimes are shown at 0.7 power factor. Backup times are approximate and may vary with equipment, configuration, battery age, temperature, etc. 6: compatible with 600 mm deep rack					
<b>Part Numbers</b>					
EX	68 180	68 181	68 183	68 400	68 402 - XL: 68 404
EX (RT2U format, includes rack kit)	/	68 182	68 184	68 401	68 403
EX HotSwap (RT3U format, includes rack kit + HotSwap MBP)	/	/	/	FR: 68406 DIN: 68407 BS: 68408 IEC: 68409 HW: 68410	FR: 68412 DIN: 68413 BS: 68414 IEC: 68415 HW: 68416
EX Netpack (RT2U format, includes rack kit and NMC card)	/	/	/	68 411	68 417
EX EXB	/	68 185	68 185	/	/
EX EXB (RT2U format, includes rack kit)	/	68 186	68 186	/	/
EX EXB (RT3U format, includes rack kit)	/	/	/	68 405	68 405
EX Rack Kit 2U/3U	/	/	/	68 441	68 441

