

ENTERPRISE™ UNINTERRUPTIBLE POWER SUPPLIES BY MINUTEMAN® for CPI Racks and Cabinet Systems

KEY FEATURES

- Provide a continuous, true sinewave output from line power.
- Expandable runtime with external batteries (not included).
- Independent battery chargers ensure constant readiness.
- Browser-based power monitoring and e-mail/pager alarm with included software.
- IP addressable with SNMP card (not included).
- NEMA or IEC style outlets, and fax/modem/phone line protection.
- Rack-mount brackets included. Attaches to 19" wide 2-post rack.

APPLICATIONS

- Use Uninterruptible Power Supplies (UPS) on 19" wide CPI Rack and Cabinet Systems to provide a continuous, true sinewave output from line power.
- UPS provide the best power protection for computer, data storage, network and telecommunications equipment.

USE WITH

- M-Series MegaFrame® Cabinet System
- C-Series SlimFrame™ Cabinet System
- E-Series ISP Co-Location Cabinet System
- T-Series SteelFrame Cabinet System
- Seismic Frame® Cabinet System
- Universal Rack™
- Standard Rack
- 6" Deep Standard Rack
- QuadraRack™ 4-Post Frame
- QuadraRack™ Server Frame

RELATED ACCESSORIES

- Vertical Power Strips for CPI Racks
- Vertical Power Strips for CPI Cabinets
- Rack-Mount Power Strips
- High-Voltage PDUs



The MINUTEMAN® Enterprise™ Series Uninterruptible Power Supply (UPS) provides the best power protection available for computer, data storage, network and telecommunications equipment stored in CPI Racks and Cabinets.

UPS corrects variations in line power due to line "noise" and harmonics, power surges, power sags (brownouts), variable frequencies, variable voltages, power spikes and transients, and the temporary loss of power (blackouts). All Enterprise UPS include internal batteries, and current and voltage conditioning circuits. The MINUTEMAN Enterprise Series UPS provides a continuous, true sinewave output from line power that is critical to equipment performance.

Each UPS includes browser-based MINUTEMAN SentryII™ Power Management Software that monitors power conditions and notifies users of problems via e-mail or page. UPS communicates to a server via a RS232 serial connection. An optional SNMP card is available as an accessory to make the UPS an addressable node on the network.

Each UPS has multiple outlets for electrical equipment and fax/modem/phone line protection. NEMA or IEC style outlets are available. Attach equipment directly to the UPS or use in combination with power strips to distribute power throughout the rack or cabinet. External battery packs can be added to extend runtime should a power failure occur. All battery packs have independent chargers to reduce charging time. UPS and external batteries use 2 or 3 RMU and are 16" deep. An accessory, 4-post mounting bracket is recommended when used in CPI cabinets.

See reverse for product selection. Contact CPI Technical Support (800-834-4969) for configuration assistance.

SPECIFICATIONS

- Input Voltage (Line Power):
 - 120 VAC models ~ 75-164 VAC
 - 230 VAC models ~ 150-290 VAC
- Input Frequency (Line Power): 44-66 HZ, Nominal (Auto-selectable +/- 6 HZ)
- Input Protection: Resettable Circuit Breaker
- Output Voltage (Line Power):
 - 120 VAC models ~ +/- 12% (105-128 VAC)
 - 230 VAC models ~ -5/+12% (210-250 VAC)
- Output Voltage (Battery Power):
 - 120 VAC models ~ 108 VAC, 113 VAC or 117 VAC
 - 230 VAC models ~ 215 VAC, 225 VAC or 235 VAC
- Transfer Time: 2 ms maximum
- On-battery Waveshape: True sinewave
- Protection: Overcurrent and short circuit protected latching shutdown on overload
- Surge energy rating (one time, 10/1000ms waveform):
 - 120 VAC models ~ 500 J
 - 230 VAC models ~ 440 J
- Surge response time: 0 ns (instantaneous) normal mode < ns common mode
- Noise filter: normal and common mode EMI/RFI
- Typical Battery Life: 3-6 years, depending on the number of discharge cycles and ambient temperatures
- Typical Recharge Time: 2 to 5 hours from total discharge
- 10 Base-T Surge Let-through: <5%
- Phone Line Surge Protection Let-through: <1%
- Operating Temperature: 32°F to 104°F
- Storage Temperature: 5°F to 113°F
- Electromagnetic Immunity: IEC 801-2 level IV, 801-5 level V
- Audible Noise at 3 ft.: <45 dBA
- Safety and Approvals: FCC Part 15 Cat. B, DOC Class B, EN55022, EN50081-1, Normal and common mode EMI/RFI suppression, 100 kHz to 10 mHz
- MINUTEMAN SentryII™ Power Management Software (included with UPS):
 - Password controlled access for 10 users
 - Browser-based setup and monitoring
 - E-mail alarm notifications for 5 users
 - Pager alarm notification for 1 user
 - Send SNMP trap or run program on alarm
 - Unattended shutdown, scheduled or event actuated
 - Event logging with export capability
 - Serial RS232 server connection, cable included
 - Optional SNMP plug-in card makes UPS an addressable node
 - Operating Systems Supported:
 - Microsoft Windows 95/98/ME/XP
 - Microsoft Windows NT 4.0 (SP6 recommended)
 - Microsoft Windows 2000
 - Novel Net Ware 4.11 and 5.1
 - Red Hat Linux version 6.12 and 7.1
 - SCO UnixWare version 7.1.1
 - SCO Open Server version 5.06
 - HP-UX version 11
 - IBM AIX version 4
 - Other Unix/Linux Systems
- 6' attached cord with plug on NEMA/30 Amp models
- Includes rack-mount brackets for 2-post rack. Order cabinet mounting brackets separately
- Finish: Black only

ORDERING TABLE

120 Volt ~ 15 Amp With NEMA Plugs & Outlets									
Part Number	Load		Runtime (min.)		Internal Batteries		# of Outlets		Shipping Weight
	VA	Watts	Full Load	Half Load	Qty	Type	UPS	Surge	
13450-050	500	300	12.3	29.1	2	12VCD 4.5Ah	3	1	49 lb
13450-075	750	450	11.5	27.6	2	12VCD 7.2Ah	3	1	58 lb
13450-110	1100	660	8.4	20.6	4	12VCD 4.5Ah	5	1	62 lb
13450-150	1500	900	7.8	20.3	4	12VCD 7.2Ah	5	1	80 lb

Notes: Outlets are NEMA 5-15R. Plug is NEMA 5-15P. 6' L attached cord. Runtimes based on rated loads. Actual run time may vary. UPS is 19" rack-mount, 2 RMU high, 16" deep.

120 Volt ~ 30 Amp With NEMA Plugs & Outlets									
Part Number	Load		Runtime (min.)		Internal Batteries		# of Outlets		Shipping Weight
	VA	Watts	Full Load	Half Load	Qty	Type	UPS	Surge	
13450-230	2300	1380	9.6	23.5	4	12VCD 12Ah	7	1	94 lb
13450-320	3200	1920	5.4	13.9	4	12VCD 12Ah	7	1	94 lb

Notes: Outlets are NEMA 5-15R. Plug is NEMA L5-30P. 6' L attached cord. Runtimes based on rated loads. Actual run time may vary. UPS is 19" rack-mount, 3 RMU high, 16" deep.

230 Volt ~ 15 Amp With IEC Plugs & Inlets									
Part Number	Load		Runtime (min.)		Internal Batteries		# of Outlets		Shipping Weight
	VA	Watts	Full Load	Half Load	Qty	Type	UPS	Surge	
13451-050	500	300	12.3	29.1	2	12VCD 4.5Ah	3	1	49 lb
13451-075	750	450	11.5	27.6	2	12VCD 7.2Ah	3	1	58 lb
13451-110	1100	660	8.4	20.6	4	12VCD 4.5Ah	5	1	62 lb
13451-150	1500	900	7.8	20.3	4	12VCD 7.2Ah	5	1	80 lb
13451-230	2300	1380	9.6	23.5	4	12VCD 12Ah	7	1	94 lb
13451-320	3200	1920	5.4	13.9	4	12VCD 12Ah	7	1	101 lb

Notes: Outlets are IEC320 C-13. Power inlet is IEC320 C-14. Power cord not included. Runtimes based on rated loads. Actual runtime may vary. UPSes 13451-050 through 13451-150 are 19" rack-mount, 2 RMU high, 16" deep. UPS 13451-230 and 13451-320 are 3 RMU, 16" deep.

External Battery Packs (Extends runtime, see runtime tables)		
Part Number	Description	Shipping Weight
13460-001	External Battery Pack for 500-1500 VA Load UPS, 2 RMU	51 lb
13460-002	External Battery Pack for 2300-3200 VA Load UPS, 3 RMU	65 lb
13460-003	Extra Capacity External Battery Pack for 500-1500 VA Load UPS, 2 RMU	81 lb
13460-004	Extra Capacity External Battery Pack for 2300-3200 VA Load UPS, 3 RMU	112 lb

SNMP Interface Card With NEMA Plugs & IEC Outlets		
Part Number	Description	Shipping Weight
13466-001	SNMP Interface Card	1 lb

Notes: MINUTEMAN SentryII™ Power Management and Diagnostic Software is included with each UPS. UPS are equipped with RS232 connector and include a cable for direct attachment to a server. SNMP card allows UPS to attach directly to the network. UPS becomes a node on the network, like a server.

Rack-Mounting Bracket for CPI Cabinet Systems		
Part Number	Description	Shipping Weight
13469-701	UPS Mounting Bracket for CPI Cabinet Systems, 19"W x 2 RMU	5 lb

RUNTIME TABLE

Equipment Rated Power			120 VAC UPS Estimated Runtime*					
Amps	VA	Watts	5-10 min.	30 min.	1 hour	2 hours	4 hours	8 hours
1	120	84	13450-050	13450-050	13450-050	13450-075	13450-075	13450-050 & (1) 13460-001
2	240	168	13450-050	13450-050	13450-075	13450-150	13450-050 & (1) 13460-001	13450-110 & (1) 13460-001
3	360	252	13450-050	13450-075	13450-150	13450-050 & (1) 13460-001	13450-050 & (2) 13460-001	13450-050 & (4) 13460-001
4	480	336	13450-050	13450-110	13450-150	13450-150 & (1) 13460-001	13450-150 & (3) 13460-001	13450-075 & (3) 13460-003
5	600	420	13450-050	13450-110	13450-050 & (1) 13460-001	13450-050 & (1) 13460-003	13450-050 & (1) 13460-003	13450-230 & (2) 13460-004
6	720	504	13450-050	13450-150	13450-230	13450-110 & (2) 13460-001	13450-110 & (4) 13460-001	13450-320 & (5) 13460-002
7	840	588	13450-075	13450-150	13450-150 & (1) 13460-001	13450-230 & (1) 13460-002	13450-075 & (5) 13460-001	13450-150 & (5) 13460-003
8	960	672	13450-075	13450-150	13450-150 & (1) 13460-001	13450-110 & (1) 13460-001	13450-150 & (3) 13460-003	13450-230 & (4) 13460-004
9	1080	756	13450-075	13450-230	13450-075 & (1) 13460-003	13450-075 & (2) 13460-003	13450-230 & (2) 13460-004	13450-320 & (4) 13460-004
10	1200	840	13450-110	13450-230	13450-075 & (1) 13460-003	13450-110 & (4) 13460-001	13450-230 & (4) 13460-002	13450-230 & (5) 13460-004
11	1320	924	13450-150	13450-110 & (1) 13460-001	13450-150 & (2) 13460-001	13450-110 & (4) 13460-001	13450-320 & (5) 13460-002	13450-230 & (5) 13460-004
12	1440	1008	13450-150	13450-110 & (1) 13460-001	13450-110 & (3) 13460-001	13450-110 & (5) 13460-001	13450-110 & (5) 13460-003	13450-230 & (5) 13460-004
13	1560	1092	13450-150	13450-110 & (1) 13460-001	13450-110 & (3) 13460-001	13450-110 & (5) 13460-001	13450-150 & (5) 13460-003	Call For Details
14	1680	1176	13450-150	13450-110 & (1) 13460-001	13450-110 & (3) 13460-001	13450-150 & (5) 13460-001	13450-150 & (5) 13460-004	Call For Details
15	1800	1260	13450-150	13450-110 & (3) 13460-001	13450-110 & (3) 13460-001	13450-150 & (3) 13460-003	13450-230 & (4) 13460-004	Call For Details

Note: Runtime based on rated (nameplate) loads. Actual runtime may vary based on system configuration, temperature and load.

RUNTIME TABLE

Equipment Rated Power			230 VAC UPS Estimated Run Time*					
Amps	VA	Watts	5-10 min.	30 min.	1 hour	2 hours	4 hours	8 hours
1	120	84	13451-050	13451-050	13451-050	13451-075	13451-075	13451-050 & (1) 13460-001
2	240	168	13451-050	13451-050	13451-075	13451-150	13451-050 & (1) 13460-001	13451-110 & (1) 13460-001
3	360	252	13451-050	13451-075	13451-150	13451-050 & (1) 13460-001	13451-050 & (2) 13460-001	13451-050 & (4) 13460-001
4	480	336	13451-050	13451-110	13451-150	13451-150 & (1) 13460-001	13451-150 & (3) 13460-001	13451-075 & (3) 13460-003
5	600	420	13451-050	13451-110	13451-050 & (1) 13460-001	13451-050 & (1) 13460-003	13451-050 & (1) 13460-003	13451-230 & (2) 13460-004
6	720	504	13451-050	13451-150	13451-230	13451-110 & (2) 13460-001	13451-110 & (4) 13460-001	13451-320 & (5) 13460-002
7	840	588	13451-075	13451-150	13451-150 & (1) 13460-001	13451-230 & (1) 13460-002	13451-075 & (5) 13460-001	13451-150 & (5) 13460-003
8	960	672	13451-075	13451-150	13451-150 & (1) 13460-001	13451-110 & (1) 13460-001	13451-150 & (3) 13460-003	13451-230 & (4) 13460-004
9	1080	756	13451-075	13451-230	13451-075 & (1) 13460-003	13451-075 & (2) 13460-003	13451-230 & (2) 13460-004	13451-320 & (4) 13460-004
10	1200	840	13451-110	13451-230	13451-075 & (1) 13460-003	13451-110 & (4) 13460-001	13451-230 & (4) 13460-002	13451-230 & (5) 13460-004
11	1320	924	13451-150	13451-110 & (1) 13460-001	13451-150 & (2) 13460-001	13451-110 & (4) 13460-001	13451-320 & (5) 13460-002	13451-230 & (5) 13460-004
12	1440	1008	13451-150	13451-110 & (1) 13460-001	13451-110 & (3) 13460-001	13451-110 & (5) 13460-001	13451-110 & (5) 13460-003	13451-230 & (5) 13460-004
13	1560	1092	13451-150	13451-110 & (1) 13460-001	13451-110 & (3) 13460-001	13451-110 & (5) 13460-001	13451-150 & (5) 13460-003	Call For Details
14	1680	1176	13451-150	13451-110 & (1) 13460-001	13451-110 & (3) 13460-001	13451-150 & (5) 13460-001	13451-150 & (5) 13460-004	Call For Details
15	1800	1260	13451-150	13451-110 & (3) 13460-001	13451-110 & (3) 13460-001	13451-150 & (3) 13460-003	13451-230 & (4) 13460-004	Call For Details

Note: Runtime based on rated (nameplate) loads. Actual runtime may vary based on system configuration, temperature and load.

