MINUTEMAN® CPE™ Series
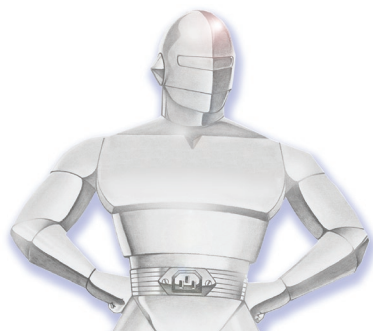

On-line uninterruptible power supplies with optional extended runtime

Features at a Glance

- Compact Tower Design to Meet Your Installation Needs
- Unity Input Power Factor for Maximum Efficiency
- Easy Maintenance and Swappable Battery
- Smart Battery Management
- Matching Battery Cabinets
- Complete Circuitry Protection

The CPE is a sophisticated yet affordable single-phase UPS system. It offers on-line technology and a wide input voltage range to provide a constant clean, steady sine wave to protected equipment, even without going to battery mode. It can instantly switch to battery, and its battery management system and easy, swappable battery packs make maintenance trouble free.

The CPE is Ideal for Protecting

- Servers & Networks
- Telecommunications Equipment
- Industrial Equipment
- Medical Imaging Equipment
- Any Sensitive Electronic Devices

The unity input power factor meets today's industry standard for energy savings and low reflected harmonics, so you get the maximum protection available.

Microprocessor Control

The CPE's advanced microprocessor control gives you greater reliability, functionality and smaller size than other designs. The systems feature high overload handling without transfer to the bypass. You are also protected in case of short circuit or over-temperature conditions.

Easy Plug and Play Design

The CPE is easy to install. All models come standard with input cables, so all you have to do is plug the unit into your utility power and plug the equipment you want protected into the back of the unit. Turn it on and you're done! Every CPE unit automatically senses the operating frequency, and adjusts accordingly.

User-Friendly Control Panel

The user-friendly display clearly communicates the UPS status, and makes diagnostics a trouble-free task. The standard communications software allows for easy control and shutdown of your protected equipment during a blackout, and also lets you remotely perform diagnostics, communicate to the UPS via SNMP/web/network adapter, access UPS functions through the web, and receive alerts about specific events via SMS messages. The free software supports Novell NetWare, Windows 95/98/2000/Me/XP/NT, Linux, and FreeBSD. Major UNIX platforms are also available.

Communications

The CPE comes standard with shutdown software. The software gives you control of the UPS, and allows a graceful shutdown when the utility power fails, and gives you the ability to:

- Remotely test major operating functions of the UPS
- Communicate via SNMP/web/network (with adapter card)
- Access UPS functions via the web
- Receive SMS alerts when specific events occur

A standard RS232 interface allows you to communicate with the UPS through a network or computer. The standard software is compatible with Novell NetWare, Windows 95/98, Windows NT, Windows XP, or other Windows systems, Linux, and FreeBSD.

The CPE also has SNMP adaptability through an optional SNMP card. Optional AS/400 or True Relay Interface cards also give the ability to remotely monitor the UPS using a variety of computing platforms.

Precision Power Conditioning

- Tight Voltage Regulation
- Frequency Isolation
- Good Harmonic Reduction
- Unity Power Factor Input, with 0.5 Lagging to Unity
- Short Circuit Protection
- Transient Protection

Batteries

Batteries are the most expensive component of a UPS system. Protect them and extend their life with the Smart Battery Management System (SBMS). SBMS continuously monitors battery status and recharges whenever necessary, so you have worry-free battery power.

Matching battery cabinets make your CPE look great and allow you easy battery access.

Battery Specifications

Battery Type:	Sealed Lead Acid Maintenance Free		
Quantity (pcs) (1kVA / 2kVA / 3kVA)	3	6	8
Voltage (VDC) (1kVA / 2kVA / 3kVA)	36	72	96
Recharge Time	8 hours to 90%		

Battery Run Time Reference (Internal Battery)

Load	1 kVA	2 kVA	3 kVA	
400VA / 280W	28 Min.	63 Min.	96 Min.	*Extended batteries with matching cabinets can extend run times to virtually any length of time.*
800VA / 560W	9 Min.	25 Min.	72 Min.	
1000VA / 700W	8 Min.	17 Min.	24 Min.	
1500VA / 1050W		10 Min.	18 Min.	
2000VA / 1400W		7 Min.	14 Min.	
2500VA / 1750W			10 Min.	
3000VA / 2100W			8 Min.	

Communications Options

True Relay Card
A 10-pin terminal is supported to offer the signals of Bypass, Utility Normal/Failure, Inverter On, Battery Low, Battery Bad, UPS Alarm, and UPS Shutdown.
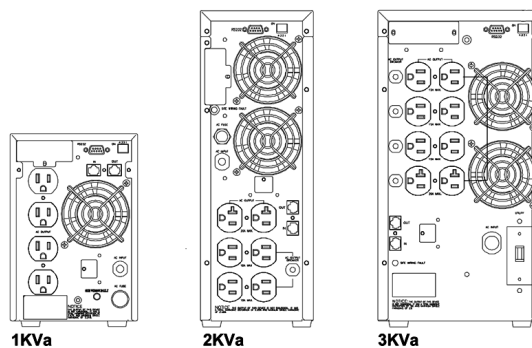
AS/400 Card
A DB9 port is supported to offer the signals of Bypass, Utility Normal/Failure, Inverter On, Battery Low, and UPS Shutdown.

WEB/SNMP Card
Integrates multi-network communication protocols to enable comprehensive, easy-to-understand and secure remote monitoring and management of the UPS via the Internet.

MINUTEMAN® CPE™ Series Specifications

Model	1000 VA	2000 VA	3000 VA
Input			
Voltage (VAC)	80 - 140		
Frequency	50/60 +/- 5% (Auto Sensing)		
Phase	Single		
Input Power Factor Correction	>0.98 (Full Load)		
Input Power Cord (NEMA)	5-15P	5-20P	L5-30P
Output			
Voltage (VAC)	100/110/115/120		
Capacity (VA/W)	1000VA/700W	2000VA/1400W	3000VA/2100W
Rated Power Factor	0.7 Lagging		
Load Power Factor Range	0.5 Lagging to Unity within KW Rating of Unit		
Wave Form	Sine Wave, THD <3% (no load to full load)		
Voltage Regulation	+/- 2%		
Transient Response (ms)	+/- 4% Under Full Load, Change and Corrected within 60 ms		
Frequency Stability	+/- 0.5 Hz (Free Running)		
Synchronization	Slew Rate: 1 Hz/Sec. Max Synchronizing Window +/-5%		
Transfer Time	0 ms		
Crest Factor	3:1		
Runtime (Full Load)	>8 min.	>7 min.	>8 min.
DC Start	Yes		
Outlets (NEMA) 120 VAC	4 x 5 - 15R	4 x 5 - 15R + 2 x 5 - 15/20R	6 x 5 - 15R + 2 x 5 - 15/20R
Display			
LED Indicators	Utility, Battery Low, Inverter, Bypass, Test OK, Overload Fault, Load/Battery Level, and System Fault Conditions		
Self Diagnostics	On-Demand Push Button		
Alarms			
Audible and Visual	Line Failure, Battery Low, Transfer to Bypass, Overload, System Fault Conditions		
Physical			
Tower Net Dimensions (WxHxD, in.)	5.8 x 8.78 x 15.8	5.1 x 14.4 x 18.9	7.5 x 14.4 x 17.8
Tower Net Weight (lbs. / kg)	33 / 15	60 / 27	79 / 36
Environmental			
Operating Temperature	0° C - 40° C		
Altitude	0 to +10,000 ft		
Humidity	30 to 90% RH Maximum, Non-condensing		
Noise	< 45 dB at 1 meter		
Safety Conformance			
Safety Standard	EN500091-1, UL1778, CSA 22.2		
EMC Standard	EN500091-2, EN61000-3-2, EN61000-3-3, FCC Class A		
Agency Marks	UL, CE, cUL		

1KVa   2KVa   3KVa
Tower Models (Rear View)

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