

# MINUTEMAN MBK™ Series



## 4 Models Full Protection

- ▶ **Designed for:**
  - PC Workstations
  - Retail Point-of-Sale Equipment
  - Telephone Key Systems
  - Home Offices
- ▶ **Full Protection from Surges, Spikes, Brownouts & Blackouts**
- ▶ **Modem/Fax Surge Protection**
- ▶ **Surge-Only Receptacle**
- ▶ **Built-in Self-Test**
- ▶ **Hot Swappable Batteries**
- ▶ **Advanced Battery Monitoring**
- ▶ **Includes Coupon for MINUTEMAN SentryII™ Power Management & Diagnostic Software (520 and 680 units)**
- ▶ **3-Year Warranty**
- ▶ **\$30,000 MINUTEMAN Platinum Protection Plan® (U.S. and Canada)**

## a stand-by UPS for complete power protection

The MINUTEMAN MBK Series provides complete protection from all types of power problems at an affordable price. The MBK Series offers great features inside its unique, space-saving design that fits unobtrusively in unused corners, and its fast-recharge batteries keep important electronic equipment up and running for as long as 50 minutes.

### Ideally Suited for Small Offices, Workstations, Retail POS Terminals, and Home Computers

MBK Series UPS models are available in 300, 320, 520, and 680 VA sizes to provide total protection from surges, spikes, brownouts, and blackouts. With a surge protection capability that far exceeds similar units, the MBK is ideal for use in situations where electrical circuits are shared and power loads fluctuate, as is the case in most office buildings, homes, and retail stores. In the event of power outages, the MBK's battery back-up lets you maintain normal operations by running in battery mode, or gives you adequate time to safely shut down the system.

### All the Features You Expect, Plus Extra Performance

All MBK models are Internet ready, providing built-in protection for phone and modem lines — a link that is often left vulnerable to power problems — plus a surge-only receptacle for devices such as a laser printer or scanner. MBK units also have the ability to automatically sense the frequency of incoming power and adjust accordingly. The MBK 520 and 680 models are equipped with a communications port and each ships with a coupon for a copy of MINUTEMAN SentryII™ power management and diagnostic software with communications cable.

To ensure reliability, MBK units feature two built-in test functions — an automatic 14-day self-testing mechanism, and a user-initiated test sequence. Additionally, the MBK's microprocessor incorporates advanced battery monitoring that prevents damage to the internal batteries from overcharging. Other features include multiple audible alarms to alert the user of certain events, a site wiring fault indicator to inform the user of faulty wiring, and hot swappable batteries.

### Reliability — Guaranteed

Every MBK model is backed by an unprecedented 3-year warranty and the \$30,000 MINUTEMAN Platinum Protection® Plan.

[minutemanups.com](http://minutemanups.com)

800.238.7272

# MBK Series Specifications

Note 230V Specs Shown in ( )	MBK 300 (MBK 300i)	MBK 320 (MBK 320i)	MBK 520 (MBK 520i)	MBK 680 (MBK 680i)
Maximum Load VA / Watts	300 / 195	320 / 208	520 / 328	680 / 442
Battery Receptacles	2 5-15R (2 IEC 320)	3 5-15R (3 IEC 320)	3 5-15R (3 IEC 320)	3 5-15R (3 IEC 320)
Surge Only Receptacles	1 5-15R (1 IEC 320)	1 5-15R (1 IEC 320)	1 5-15R (1 IEC 320)	1 5-15R (1 IEC 320)
Typical Backup Time - Pentium PC with 15" monitor	10-16 minutes	18-20 minutes	22-24 minutes	46-50 minutes
Software Communications Port	N/A	N/A	DB9, RS232	DB9, RS232
Battery Type: Spill proof sealed lead acid	One 12V4.5AH	One 12V7AH		One 12V11AH
Acceptable Input Voltage	0-136 VAC (0-270 VAC)			
Input Voltage (On-line Operation)	105-136 VAC (175-270 VAC) - User Adjustable			
Output Voltage (On-line Operation)	105-136 VAC (210-250 VAC) - User Adjustable			
Normal Input Frequency	50 or 60 Hz Auto-sensing			
Input Protection	Manual reset circuit breaker			
Frequency Limits (On-line Operation)	50 or 60 Hz $\pm$ 5%			
Transfer Time	2-4 ms typical			
On-battery Output Voltage	115 VAC (230 VAC)			
On-battery Frequency	50 or 60 Hz $\pm$ 1% unless synchronized to utility during brownout			
On-battery Wave Shape	Zero cross delayed simulated sinewave			
Protection	Over-current and short circuit protected, latching shutdown on overload			
Surge Energy Rating in Joules (one time 10/1000 ms waveform)	500 J (440 J)			
Surge Current Capability (one time 8/20 ms waveform)	19.5 K Amps total			
Surge Response Time	0 ns (instantaneous) normal mode, <5 ns common mode			
Surge Voltage Let Through	<5% (Percentage of applied ANSI C62.41 cat A $\pm$ 6V test waveform)			
Noise Filter	Normal and common mode EMI/RFI suppression			
Typical Battery Life	3 to 6 years, depending on number of discharges and ambient temperature			
Typical Recharge Time	2 to 5 hours from total discharge			
Modem Surge Protection Socket	RJ11			
Telephone Line Let Through	<1%(Percentage of an applied $\pm$ 6KV 1.2/50 ms 500A 8/20 ms test)			
Operating Temperature	+32 to 104 degrees F (0 to 40 degrees C)			
Storage Temperature	+5 to +113 degrees F (-15 to +45 degrees C)			
Operating Storage and Relative Humidity	0-95% non-condensing			
Operating Elevation	0 to +10,000 ft. (0 to +3,000 m)			
Storage Elevation	0 to +50,000 ft. (0 to 15,000 m)			
Electromagnetic Immunity	IEC 801-2 Level IV, 801-4 Level IV, 801-5 Level III			
Audible Noise at 3 ft. (1 m)	<45 dBA			
Safety Certification	UL, CUL, CE, TUV			
EMC Certification	FCC Class B certified (230V Class A)			
Dimensions H x W x D	6.75 x 6.75 x 6.5 in (17 x 17 x 16.5 cm)	9.25 x 8.5 x 8.5 in (23 x 22 x 22 cm)		
Net Weight / Shipping Weight	10.1 / 11.4 lbs (4.7 / 5.2 kg)	15.5 / 17.6 lbs (7.0 / 8.0 kg)	16.4 / 18.6 lbs (7.5 / 8.4 kg)	22.4 / 24.7 lbs (10.2 / 11.2 kg)

**MBK 520 Back View**

**MBK 520i Back View**



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**MINUTEMAN**  
UNINTERRUPTIBLE POWER SUPPLIES

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