

# UPS/BBS SYSTEMS

## MP2000/MP2000E



- ◆ Local Keypad Programmability - including status monitoring, setting/testing of various parameters, dry contact programming, and more. No laptop necessary.
- ◆ Six Fully Programmable Dry Contacts - provides greater control of system components and functions.
- ◆ Backlit LCD Displays - easily readable in all light conditions.
- ◆ Remote Access through a serial interface via an RS232, USB port or Ethernet communication card.
- ◆ 1500 watt; 2000VA
- ◆ Anderson connector
- ◆ Rotating Meter display
- ◆ Provides fully interactive program and status reporting using built-in, Windows™-compatible software.
- ◆ Time/Date Stamp of Events and Alarms - up to 100 events with download and print capability.
- ◆ Data Dump Commands available through RS232 port, USB port or Ethernet communication card.
- ◆ Caltrans QPL approval



## FEATURES

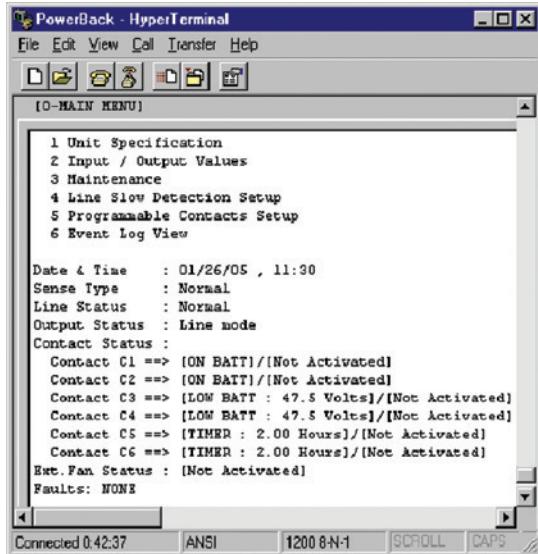
	MP2000	MP2000E	MP2000CA
Output Power (VA)	2000	2000	2000
Active Output Power (Watts)	1500	1500	1500
Transient voltage protection from damaging line spikes	◆	◆	◆
Low harmonic AC sine wave output	◆	◆	◆
Intelligent Buck and Boost Operation for brownout and surge protection	◆	◆	◆
Noise suppression, FCC Class A	◆	◆	◆
Multiple mounting configurations	◆	◆	◆
6 Fully programmable dry contacts for control and reporting functionality	◆	◆	◆
Backlit LCD display, 2 row by 20 characters Black on Green	◆	◆	
Time/Date stamp of events and alarms	◆	◆	◆
Intelligent remote communication capability via RS232, USB	◆	◆	◆
Ethernet Modem		◆	◆
Ethernet SNMP Card - SNMP compliant			◆
Web-based Ethernet			◆

## STATUS & EVENT REPORTING

MP Series UPS provides fully interactive program and status reporting capabilities via built-in, Windows™-compatible software. Whether using this feature for set-up, maintenance, or as a link to your traffic control command center, the ability to view moment-by-moment operations will enhance your traffic engineering and supervisory control capabilities.

## ADVANCED DISPLAY READOUT

Myers MP Series™ provides you with the tools to monitor and maintain your system at peak performance. The MP Series utilizes a bright LCD display and touch keys to provide real time information including input/output status, battery percentages, online and load status, time/date stamp of events, and more. Easy-to-read scrolling menus assist you with maintenance and programming of functions.



MP Series UPS Displays

## CONNECTIVITY

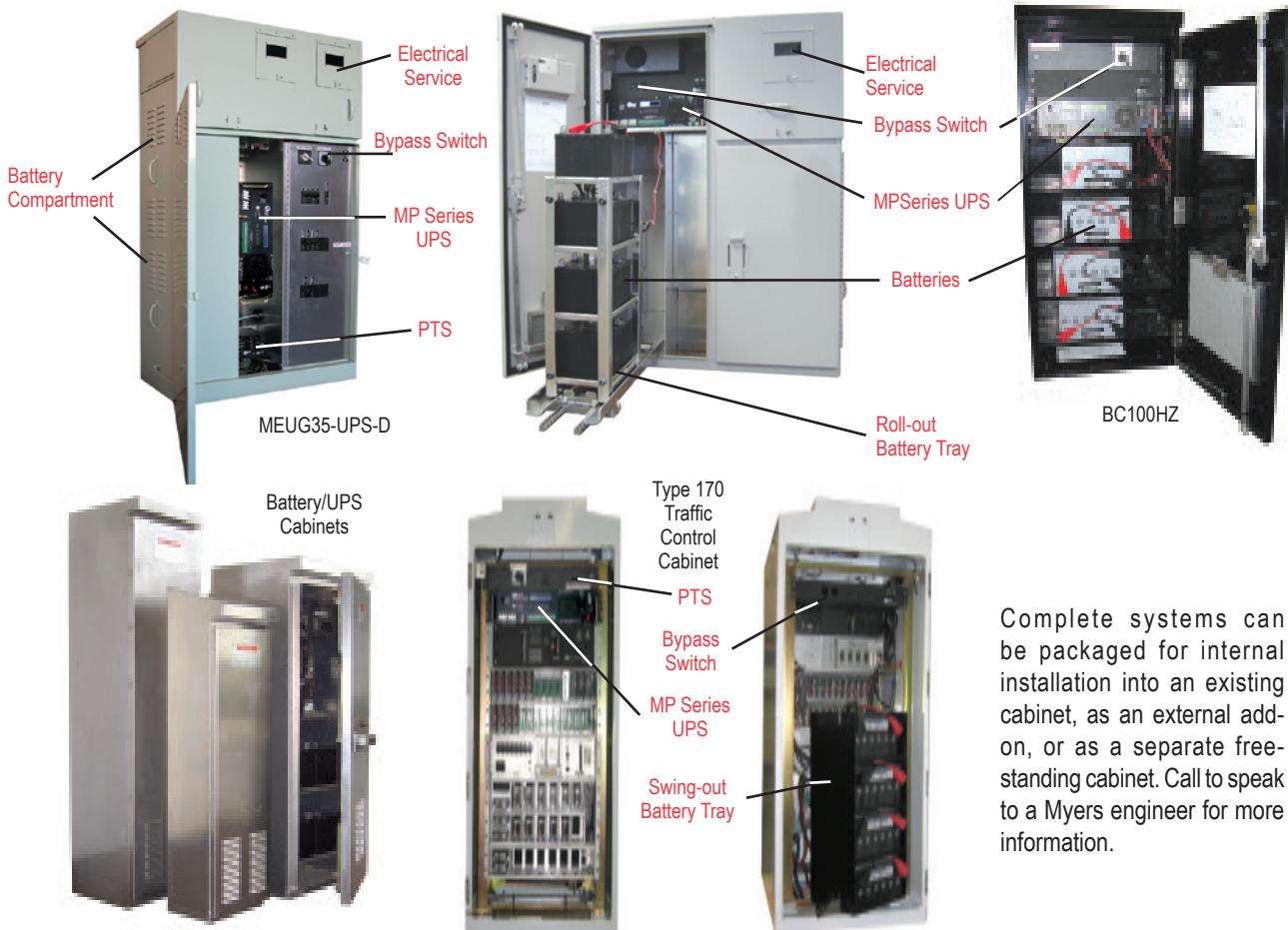
Effective system integration and communications depends on connectivity. In addition to AC input/output connectors, Myers MP Series provides NC/NO dry contacts (fully programmable), giving you greater versatility in powering external system components during normal or battery backup operations. An RS232 serial port, USB, or Ethernet card allows for complete remote communications.



Programmable Dry Contacts

## INSTALLATION CONFIGURATIONS

With MP Series UPS you not only get the right UPS components, you also benefit from Myers Power Products' years of experience in cabinet design to ensure your entire battery backup system is configured to precisely meet your needs. Standard and custom configurations are available for Type 170/332, NEMA, Myers MEUG service pedestals, and more.



Complete systems can be packaged for internal installation into an existing cabinet, as an external add-on, or as a separate free-standing cabinet. Call to speak to a Myers engineer for more information.



## BATTERY OPTIONS

MP Series UPS batteries are specifically designed for UPS applications and are completely sealed and maintenance-free. These absorbed glass mat, valve regulated lead acid (AGM/VRLA) batteries can withstand extreme temperatures, are rated non-spillable by ICAO IATA/DOT and available in a variety of ampere-hour ratings. Battery harnesses with "quick-connect" cables are included with complete system solutions packages. Sample run times are listed below based on a single string (4 batteries) at 25°C.

TOTAL POWER REQUIRED (WATTS)	1 STRING 55 AH @25C	1 STRING 79 AH @25C	1 STRING 92 AH @25C	1 STRING 105 AH @25C
100	18 HR 10 MIN	24 HR 0 MIN	30 HR 0 MIN	24 HR 40 MIN
200	9 HR 40 MIN	15 HR 6 MIN	17 HR 55 MIN	20 HR 13 MIN
300	6 HR 35 MIN	10 HR 0 MIN	11 HR 58 MIN	13 HR 56 MIN
400	4 HR 42 MIN	7 HR 13 MIN	8 HR 43 MIN	9 HR 11 MIN
500	3 HR 41 MIN	5 HR 46 MIN	6 HR 35 MIN	7 HR 8 MIN
600	3 HR 1 MIN	4 HR 47 MIN	5 HR 25 MIN	6 HR 6 MIN
700	2 HR 31 MIN	4 HR 0 MIN	4 HR 34 MIN	5 HR 7 MIN
800	2 HR 10 MIN	3 HR 18 MIN	3 HR 55 MIN	4 HR 24 MIN
900	1 HR 53 MIN	2 HR 50 MIN	3 HR 29 MIN	3 HR 51 MIN
1000	1 HR 41 MIN	2 HR 28 MIN	3 HR 4 MIN	3 HR 31 MIN
1100	1 HR 30 MIN	2 HR 11 MIN	2 HR 45 MIN	3 HR 11 MIN
1200	1 HR 20 MIN	2 HR 0 MIN	2 HR 27 MIN	2 HR 49 MIN
1300	1 HR 9 MIN	1 HR 42 MIN	2 HR 10 MIN	2 HR 33 MIN
1400	1 HR 1 MIN	1 HR 36 MIN	1 HR 59 MIN	2 HR 19 MIN
1500	0 HR 59 MIN	1 HR 29 MIN	1 HR 52 MIN	2 HR 10 MIN

Note: Stated run times are approximate. Actual run times depend on load requirements, frequency of operation, and temperature.

For more details, refer to Myers publication Battery Options and Run Time Calculations.

## STANDARD FEATURES

- ◆ Battery backup for signalized intersections.
- ◆ Fits in all types of Traffic Cabinets or can be mounted in a Custom Enclosure or Electrical Service Pedestal.
- ◆ Low harmonic AC sinewave output.
- ◆ Fully programmable AC threshold voltages; ie, NEMA, Caltrans or Custom.
- ◆ Transient voltage protection from damaging line spikes.
- ◆ External connections are front panel accessible.
- ◆ RS232 and USB serial interface for easy programmability.
- ◆ Intelligent Buck and Boost Operation for brownout and surge protection.
- ◆ Battery Monitoring System (optional).
- ◆ Power conditioning insures reliable power.
- ◆ Back up power provided by sealed battery modules.
- ◆ Temperature-compensated charging maximizes battery life in harsh, outside environments.
- ◆ Noise suppression, FCC Class A
- ◆ Meets or exceeds Caltrans, TXDOT and GDOT UPS/BBS specifications.
- ◆ Multiple mounting configurations.

## THREE MODES OF BACKUP POWER ARE AVAILABLE

### Normal Operation

Normal Operation supporting full functions for intersections not exceeding module's specified output.\*

### Flash operation

Red/Amber flash operations for intersections that exceed module's specified output for Normal Operation.\*

### Normal/Flash Combo

Provides normal operation then reverts to flash after 2 hours or when 40% battery capacity is reached (factory default), thereby prolonging operating time.\* MP Series UPS are fully programmable including duration, percentage, and dry contact assignment.

\* Total load cannot exceed unit's maximum output for any operation.

## OPTIONS

- ◆ Power Transfer Switch
- ◆ Manual Bypass Switch
- ◆ Generator Kit: bypass switch, receptacle w/cover
- ◆ Separate battery enclosures
- ◆ Battery heater mats
- ◆ Remote Battery Monitoring System
- ◆ Remote UPS Management Systems
- ◆ Ethernet Monitoring Software

## OUTPUT RATINGS

MP2000	Output Power (VA)	2000
	Active Output Power (watts)	1500
MP2000E	Output Power (VA)	2000
	Active Output Power (watts)	1500

## DIMENSIONS

MP2000	Width (inches/mm)	17 / 432
	Height (inches/mm)	5.25 / 133
	Depth (inches/mm)	11 / 279
	Weight (lbs/kg)	46.2 / 21
MP2000E	Width (inches/mm)	17 / 432
	Height (inches/mm)	5.25 / 133
	Depth (inches/mm)	11 / 279
	Weight (lbs/kg)	46.2 / 21
PTS (Power Transfer Switch)	Width (inches/mm)	4.75 / 121
	Height (inches/mm)	4.6 / 117
	Depth (inches/mm)	6.5 / 165
	Weight (lbs/kg)	7 / 3

## BATTERY RUN TIME

Battery run time and recharging depends on load requirements and battery configurations. Refer to Battery Options and Run Time Calculations for more details.

MP Series UPS systems are 48V, 4-String Battery systems. For custom configurations contact Myers Power Products.

## GENERAL SPECIFICATIONS

Input/Output	Voltage (VAC) nominal	120
	Frequency (Hz) nominal	60
Input Current (A)	maximum 20	
Input Voltage Variation	-23% to +17%	
Voltage Waveform	Sine	
Typical Line Efficiency %	95-97	
Typical Output Voltage	<3%	
Total Harmonic Distribution	<3% THD	
Max Charge Current	10 (ADC)	
Typical Transfer Time	7 ms (max w/PTS=60 ms)	
	7 ms w/buck & boots/PTS enabled	
Audible Noise	<32 at 1m (dBA)	
Unit Operating Temp.	-37°C to +74°C	
Battery Operating Temp.	-25°C to +74°C	
Lightning / Surge Protection:	Passes ANSI/IEEE C.62.41/C.62.45 Cat A & B	



"Invest in the power of Myers."