



# SEALED LEAD ACID CALCIUM BATTERY DATA SHEET

## MP 4.5A - 12V



### Applications:

- UPS power systems
- Portable Electronic Instruments
- Emergency Lighting Systems
- Mining Search Light Products
- Portable Camping Equipments
- Remote Scientific Instruments

### Electrical Specification

Capacity	Load	Duration	Final Voltage
<b>Rated Capacity @ 25 °C (77 °F)</b>			
<b>4.50Ah</b>	0.23A	20 Hours	10.50V
<b>4.19Ah</b>	0.42A	10 Hours	10.20V
<b>3.83Ah</b>	0.77A	5 Hours	10.02V
<b>2.70Ah</b>	2.70A	1 Hour	9.60V
<b>2.25Ah</b>	4.50A	0.5 Hour	9.00V

### Physical Specification

Length	Width	Height	Overall Height
3.54 in	2.76 in	4.02 in	4.17 in
90 mm	70 mm	102 mm	106 mm
Internal Resistance@25°C Fully Charged			35 mΩ

**Weight:** 1.73 Kg.  
**Case Material:** ABS Resin

### Capacity ~ Temperature

104°F(40°C)	77°F(25°C)	32°F(0°C)	5°F(-15°C)
102%	100%	85%	65%

### Self Discharge

4 Mo. 20°C	8 Mo. 20°C	4 Mo. 30°C	8 Mo. 30°C
14%	26%	24%	40%

### Charging - Constant Voltage

@25°C (77°F)	Standby Usage:	Cyclic Usage:
<b>Voltage</b>	13.6 ~ 13.8V	14.4 ~ 14.8V
<b>Current</b>	0.45~0.56A	0.45~0.56A
<b>Current (max.)</b>	N/A	0.90A

### Life Expectancy

Standby Usage:	@25 °C	3 ~ 4 Years
<b>Cyclic Usage:</b>	100% Discharged	200 ~ 250 Cycles
	50% Discharged	500 ~ 600 Cycles
	30% Discharged	1,100 ~ 1,200 Cycles