

# Premium High Rate Battery Series

Sealed Lead Acid Battery

12 Volt – 50 Amp Hour

GPS50-12





## Features

- Lead alloy with low calcium minimizes gassing and extends life of grid.
- Through unique active material recipes, plates after undergoing curing and tank formation provide outstanding energy density and ensure the quality of the battery.
- Using brass coated lead alloy battery terminals minimizes impedance of connecting cells inside.
- Case made of ABS resin and cells kept under internal pressure protects from outer shock or impact.
- Micro-porous AGM separator completely absorbs and retains electrolyte under the pressured cell design.
- Electrolyte sufficiently serves for electrochemical reactions in battery but never spills.
- Battery cases are sealed in epoxy and cells are covered with vents to avoid cell contamination with the atmosphere and serve for internal oxygen reaction.
- With very little gas evolution, the water loss is minimized and service life is extended. Excess pressure and gas will be released which ensures safety.
- Vent design is certificated by UL.

# **Applications**

- UPS
- Communications
- Lighting
- Security & Alarm
- Medical Equipment
- Remote Monitoring
- Solar Energy Station
- Golf Carts
- Wheelchairs
- Motorcycles
- Scooters
- Riding Mowers
- Snowmobiles
- Water Sports

# Transport

- Air transportation complies with IATA/ICAO special provision A67.
- Surface transport classification as nonhazardous material as related to DOT-49CFR173.159.
- Water transport classification as nonhazardous material per IMDG Amendment 27.

# **Specifications**

Nominal Voltage (V) 12V

#### **Nominal Capacity**

20hour rate ( 2.5A to 10.50V ) 50Ah 10hour rate ( 5.0A to 10.50V ) 50Ah 5hour rate (8.5A to 10.20V) 42.5Ah 1C (50A to 9.60V) 22.5Ah 3C (150A to 9.60V) 18Ah

#### Weight

18.05kg(39.71Lbs.)

Internal Resistance (at 1KHz)  $6.8 \text{ m}\Omega$ 

**Maximum Discharge Current for** 30 seconds : 1000A

**Maximum Discharge Current for** 5 seconds : 2000A

#### **Operating Temperature Range**

Charge 0°C (32°F) to 40°C (104°F) -15 °C (5 °F) to 50 °C (122 °F) Discharge Storage -15 ℃ (5 °F) to 40 °C (104 °F)

#### Charge Retention (shelf life) at 20 °C (68 °F)

1 month 92% 90% 3 month 6 month 80%

#### Charging Methods at 25 °C (77 °F) Cycle use:

Charging Voltage 14.4 to 15.0V Maximum Charging Current:15A Standby use :

Float Charging Voltage 13.50 to 13.80V

### Life expectancy :

#### Cycle Use:

100% depth of discharge 200 cycles 80% depth of discharge 225 cycles 50% depth of discharge 500 cycles Standby Use: 3~5years

#### **Case Material** ABS

(Option: 94-HB & 94V-0 flame retardant case)

Terminal: F15

UL Listing: MH29055, 94 VO



 $207\pm^2_1$  (8.15 $\pm^{08}_{04}$ (9.17\$.04

 $233\pm_{1}^{2}$ 







mm(inch)