

Premium High Rate Battery Series

Sealed Lead Acid Battery

12 Volt - 45 Amp Hour

GPS45-12





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 (2.25A to 10.50V)
 45Ah

 10hour rate (4.5A to 10.50V)
 45Ah

 5hour rate (7.65A to 10.20V)
 38.25Ah

 1C
 (45A to 9.60V)
 20.25Ah

 3C
 (135A to 9.60V)
 16.2Ah

Weight

14.109kg (31.04Lbs.)

Internal Resistance (at 1KHz) $6 \text{ m}\Omega$

Maximum Discharge Current for **30 seconds :** 900A

Maximum Discharge Current for **5 seconds :** 1800A

Operating Temperature Range

 Charge
 $0 \degree C (32 \degree F)$ to $40 \degree C (104 \degree F)$

 Discharge
 $-15 \degree C (5 \degree F)$ to $50 \degree C (122 \degree F)$

 Storage
 $-15 \degree C (5 \degree F)$ to $40 \degree C (104 \degree F)$

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

 1 month
 92%

 3 month
 90%

 6 month
 80%

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

Charging Voltage 14.4 to 15.0V Maximum Charging Current: 13.5A **Standby use :**

Float Charging Voltage 13.50 to 13.80V

Life expectancy :

Cycle Use:

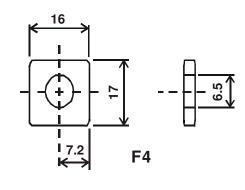
100% depth of discharge 200 cycles 80% depth of discharge 225 cycles 50% depth of discharge 500 cycles **Standby Use:** 3~5years

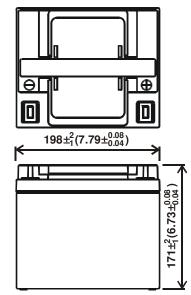
Case Material ABS

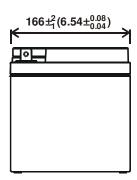
(Option: 94-HB & 94V-0 flame retardant case)

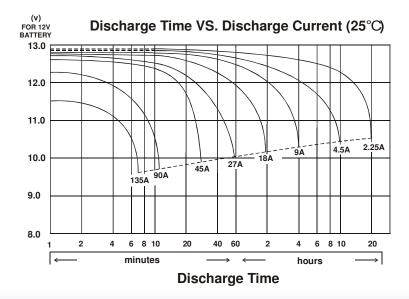
Terminal: F4

UL Listing: MH29055, 94 VO









mm(inch)