



The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.

### Battery Construction

COMPONENT	POSITIVE PLATE	NEGATIVE PLATE	CONTAINER	COVER	SAFETY VALVE	TERMINAL	SEPARATOR	ELECTROLYTE
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

### Performance Characteristics

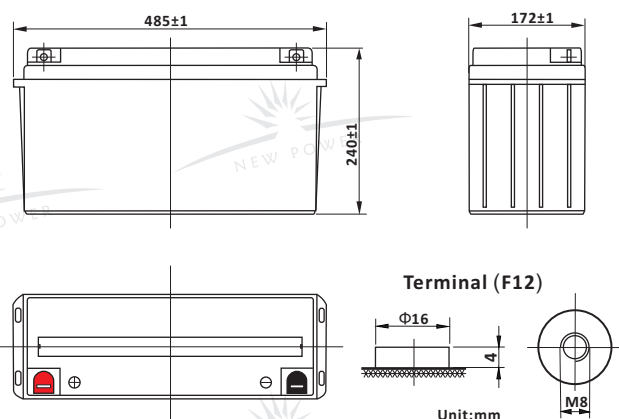
- **Nominal Voltage** ..... 12V
- **Ampere Hour Capacity**
  - 20 Hours rate (8.25A, 10.8V)..... 165Ah
  - 10 Hours rate (15.6A, 10.8V)..... 156Ah
  - 5 Hours rate (27.0A, 10.5V)..... 135Ah
  - 3 Hours rate (40.66A, 10.2V)..... 122Ah
  - 1 Hour rate (97A, 10.2V)..... 97Ah
- **Minutes of Discharge**
  - 25A to 10.5V..... 346
  - 75A to 10.2V..... 88
  - 100A to 9.6V..... 63
  - 56A to 10.2V..... 126
  - 85A to 10.2V..... 80
- **Cranking Amps**
  - 32°F/0°C ..... 1140
  - 0°F/-18°C ..... 910
- **Internal Resistance**
  - Fully charged battery (77°F /25°C)..... 3.8mΩ
- **Self-Discharge (68°F /20°C)**
  - Capacity declined per month ..... 3%
- **Opening temperature Range**
  - Discharge..... -20 ~ 60°C
  - Charge..... -10 ~ 50°C
  - Storage..... -20 ~ 60°C
- **Max. discharge current (77°F /25°C)**..... 1248A(5S)
- **Short Circuit Current**..... 2340A
- **Charge Methods: constant voltage charge (77°F /25°C)**
  - Cycle use..... 14.7 ~14.9V
  - Max. Current ..... 31.2A
  - Standby use..... 13.6 ~ 13.8V

### Application Field

- Golf and Electric Vehicles
- Floor Machines
- Aerial Lifts and Fork Lifts
- Solar and Renewable Energy
- Marine and RV
- Broadband and Cable TV
- Mobility and Medical
- Equipment Wheelchair
- Telecommunications
- Uninterruptible Power Supply

### General Features

- Environmental friendly
- α-DC technology
- Computer-aided 99.99% pure heavy-duty lead calcium grid design
- Anchored plate groups to guard against vibration
- Tank formed plates for evenly formed and capacity matched plates
- Wide operating temperatures (-40° to 60°)
- Industry leading size and performance options
- Double insulating Micro porous glass fiber separators
- Flame arresting pressure regulated safety sealing valves for safety
- Low self discharge rates (1-3%/month)
- Multi-terminal options
- Removable carry handles
- Classified as "Non-Spillable Battery" for transport
- Complies with DOT HMR49, Non-Hazardous Material
- Design Life 10 years



### Dimensions and Weight

Type	Length	Width	Height	Total Height	Approx. Weight
SI Units	485mm	172mm	240mm	240mm	45.5Kg
English Units	19.1inch	6.8inch	9.45inch	9.45inch	100.3lbs

