

### Overview

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 oneway 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

### General Features

- Positive and negative plates in lead-calcium-tin alloy;
- Stable Quality&High Reliability;
- Sealed Construction;
- Long Service Life;
- Maintenance-Free Operation;
- Low Pressure Venting System;
- Low Self Discharge;
- U.L.Component Recognition;
- Six months shelf life at 20°C;
- Design life 10 years

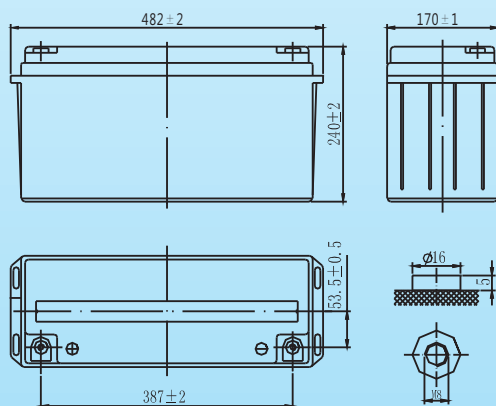
### Battery Specification

Performance Characteristics	
Nominal Voltage	12V
Number of cell	6
Design Life	10 years
<b>Nominal Capacity 77°F(25°C)</b>	
10 hour rate (15.0A, 10.8V)	150Ah
5 hour rate (27.0A, 10.5V)	135Ah
1 hour rate (102A, 9.6V)	102Ah
<b>Internal Resistance</b>	
Fully Charged battery 77°F(25°C)	≤4.5 mOhms
<b>Self-Discharge</b>	
3% of capacity declined per month at 20°C(average)	
<b>Operating Temperature Range</b>	
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
Max. Discharge Current 77°F(25°C)	1000A(5s)
Short Circuit Current	2700A
<b>Charge Methods: Constant Voltage Charge 77°F(25°C)</b>	
Cycle use	2.40-2.45VPC
Maximum charging current	45.0A
Temperature compensation	-30mV/°C
Standby use	2.20-2.30VPC
Temperature compensation	-20mV/°C

### Dimensions and Weight

Length(mm / inch)	482 / 18.98
Width(mm / inch)	170 / 6.69
Height(mm / inch)	240 / 9.45
Total Height(mm / inch)	240 / 9.45
Approx. Weight(Kg / lbs)	48.4 / 106.7

\* Weight deviation: ± 5%



### Discharge Constant Current (Amperes at 77°F25°C)

End Point								
Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h
1.60V	360	288	169	123	102	44.5	28.8	15.5
1.65V	327	214	162	120	99.0	44.2	28.2	15.4
1.70V	313	210	160	118	96.3	43.8	27.6	15.2
1.75V	288	198	156	114	93.4	43.4	27.0	15.1
1.80V	264	186	150	110	90.5	41.4	26.5	15.0

### Discharge Constant Power (Watts at 77°F25°C)

End Point								
Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	637	542	333	243	192	111	84.5	55.4
1.65V	614	504	304	235	186	109	83.9	54.1
1.70V	566	469	300	229	181	108	83.3	53.2
1.75V	532	444	294	224	177	106	82.1	52.1
1.80V	498	425	289	221	175	104	80.8	51.0

(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.All data shall be changed without notice,Westar reserves the right to explain and update the information contained hereinto.

