



Specifications

- ◆ All purpose
- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto controlsystem

ISO 9001	ISO 14001	OHSAS 18001	TLC
CE	RoHS	UL	OPV Batteries

Specifications

Nominal Voltage	12V	
Nominal Capacity(10HR)	200AH	
Dimension	Length	522±3mm (20.55 inches)
	Width	240±2mm (9.45 inches)
	Container Height	218±2mm (8.58 inches)
	Total Height (with Terminal)	224±2mm (8.81 inches)
Approx Weight	Approx 55.5 kg (122.3 lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	208.0 AH/10.4A	(20hr, 1.80V/cell, 25°C/77°F)
	200.0 AH/20.0A	(10hr, 1.80V/cell, 25°C/77°F)
	172.0 AH/34.4A	(5hr, 1.75V/cell, 25°C/77°F)
	156.0 AH/52.0A	(3hr, 1.75V/cell, 25°C/77°F)
	122.0 AH/122.0A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	2000A (5s)	
Internal Resistance	Approx 2.7mΩ	
Operating Temp.Range	Discharge : -15~50°C (5~122°F)	
	Charge : 0~40°C (32~104°F)	
	Storage : -15~40°C (5~104°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 60.0A.Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Standby Use	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104 °F)	103%
	25°C (77 °F)	100%
	0°C (32 °F)	86%
Self Discharge	GP series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	342.3	269.1	228.9	191.4	152.1	115.1	94.3	60.1	47.5	38.8	31.3	27.2	22.1	18.9	10.3
1.80V/cell	459.5	343.9	276.5	226.3	179.5	133.9	105.6	65.5	51.1	41.4	33.6	29.2	23.4	20.0	10.4
1.75V/cell	518.1	377.8	302.0	243.4	186.4	139.0	110.5	68.0	52.0	42.3	34.4	30.0	23.8	20.2	10.5
1.70V/cell	570.5	411.8	322.5	255.8	194.0	144.5	114.0	70.7	53.5	43.5	35.3	30.6	24.2	20.4	10.7
1.65V/cell	629.1	444.4	342.9	271.8	204.6	148.1	117.8	72.7	55.8	45.0	36.3	31.3	24.6	20.8	10.8
1.60V/cell	693.8	482.5	366.7	289.5	216.0	154.4	122.0	75.1	57.5	46.4	37.5	32.0	24.8	21.0	10.9

Constant Power Discharge (Watts) at 25°C (77°F)

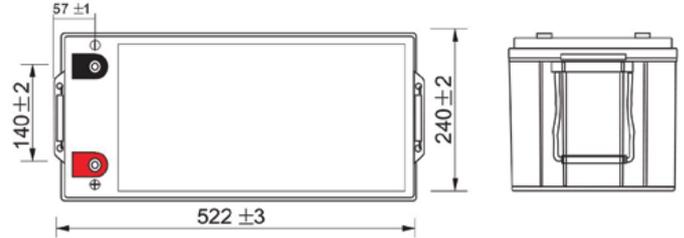
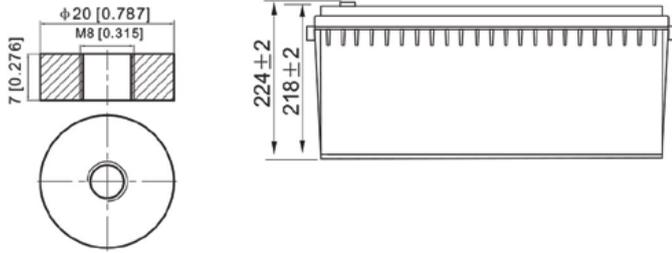
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	625.9	497.1	427.1	360.8	290.0	221.3	181.9	116.6	92.6	75.8	61.3	53.5	43.6	37.4	20.4
1.80V/cell	831.2	627.7	509.0	420.3	336.9	255.4	202.6	126.4	99.0	80.5	65.5	57.2	46.1	39.5	20.6
1.75V/cell	917.2	678.7	549.2	447.8	346.9	262.5	211.0	130.6	100.5	82.1	67.0	58.6	46.8	39.9	20.7
1.70V/cell	982.0	723.0	578.2	467.1	359.1	272.0	217.0	135.6	103.1	84.1	68.6	59.7	47.4	40.2	21.1
1.65V/cell	1067.5	773.1	610.1	492.5	375.7	276.3	222.7	138.5	107.0	86.6	70.2	60.8	48.1	41.0	21.4
1.60V/cell	1150.2	820.2	641.7	518.9	393.8	286.4	229.4	142.5	109.8	89.1	72.3	62.0	48.4	41.4	21.5

Note The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.

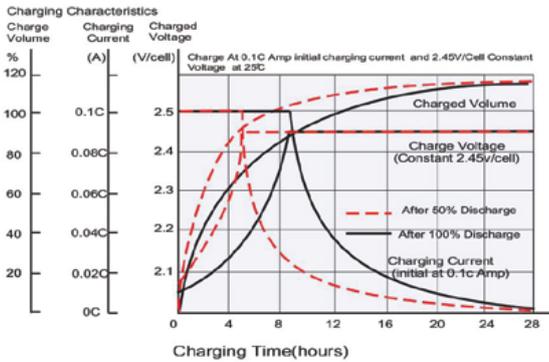
Dimensions

T11 Terminal

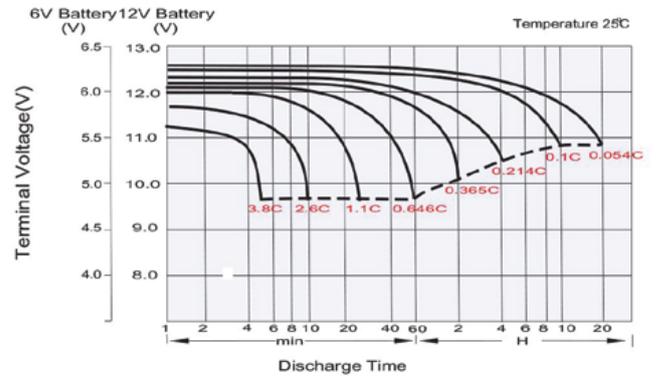
Unit: mm [inches]



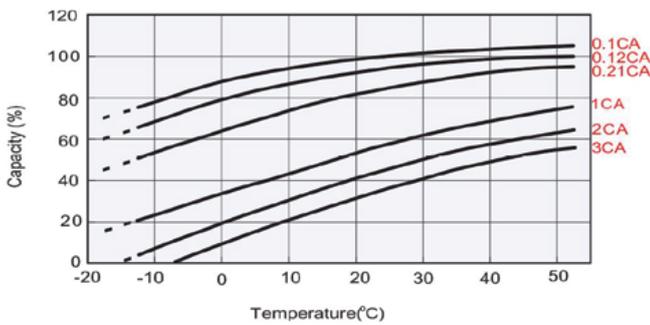
Charging Characteristics (cycle use)



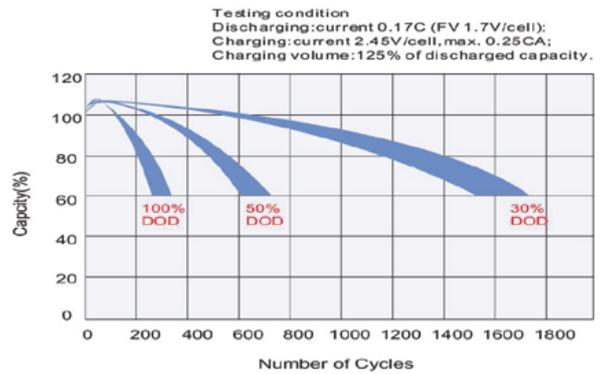
Discharge Characteristics



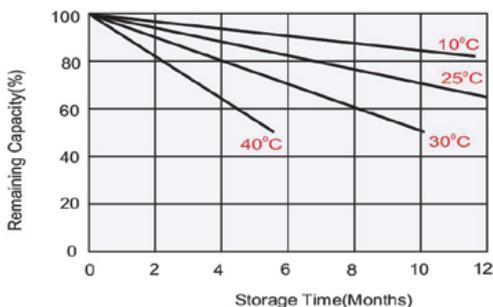
Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation of Depth of Discharge



Self Discharge Characteristics



No supplementary charge required

(Carry out supplementary charge before use if 100% capacity is required.)

Supplementary charge required before use. Optional charging way as below:

1. Charged for above 3 days at limited current 0.25CA and constant volatge 2.25V/cell.
2. Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.
3. Charged for 8-10hours at limited current 0.05CA .

Supplementary charge may often fail to recover the capacity.

The battery should never be left standing till this is reached.