



POWER SOLID

The Crown of Power Solution

VRLA AGM Battery  
PSH-12400-W  
[12V400-W/15MIN

## General Features

- Designed floating charging service life: 15 years (25°C)
- Safety valve installation for explosion proof ,Sealed and maintenance free operation
- By using strong grids, high purity lead and patented Gel electrolyte
- Extremely low self-discharge characteristic
- Wide operating temperature range from -20°C~55°C
- Lead Aluminum calcium Tin alloy high energy, prevent corrosion



## Application

- DC power supply
- UPS/EPS power supply
- Electrical devices & instruments
- Security and fire alarm systems
- Telecom stations and power stations
- Medical equipments
- Emergency lighting systems

## Constant-Voltage Charge

Rated Capacity	
20 hour rate (5.9A)	125.0AH
10 hour rate (11.8A)	118.0AH
5 hour rate (20.0A)	100.0AH
3 hour rate (29.5A)	88.5AH
1 hour rate (70.8A)	70.8AH
Capacity affected by Temperature	
40°C(104°F)	103%
25°C(77°F)	100%
0°C(32°F)	86%

### Cycle Application

1. Limit initial current less than 29.5.0A.
2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77°F).
3. Hold at 14.1V to 14.4V until current drop to under 0.70A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -30mV/°C.

### Standby Service

1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 29.5.0A continuously .When held at this voltage , the battery will seek its own current level and maintain itself in a fully charge status.
2. Temperature compensation coefficient of charging voltage is -18mV/°C.

## Battery Discharge Table

Constant Current Discharge Data Sheet (Amperes at 25°C)										
F.V/Time	3Min	5Min	8Min	10Min	15Min	20Min	30Min	45Min	60Min	90Min
9.6	2430	2094	1854	1566	1254	1008	744	606	474	282
10.02	2292	1992	1752	1506	1218	984	726	588	462	276
10.2	2136	1884	1662	1428	1164	942	702	570	450	270
10.5	1998	1776	1578	1362	1122	912	678	552	438	264
10.8	1854	1668	1494	1296	1080	882	660	540	426	258
Constant Power Discharge Data Sheet (Watts/cell at 25°C)										
9.6	4290	3852	3414	2934	2478	1938	1428	1152	900	546
10.02	4116	3708	3288	2838	2400	1896	1404	1140	894	540
10.2	3912	3540	3150	2730	2322	1854	1380	1128	882	534
10.5	3726	3390	3018	2622	2238	1812	1362	1110	876	528
10.8	3534	3228	2892	2526	2160	1776	1344	1098	870	522



POWER SOLID

The Crown of Power Solution

VRLA AGM Battery

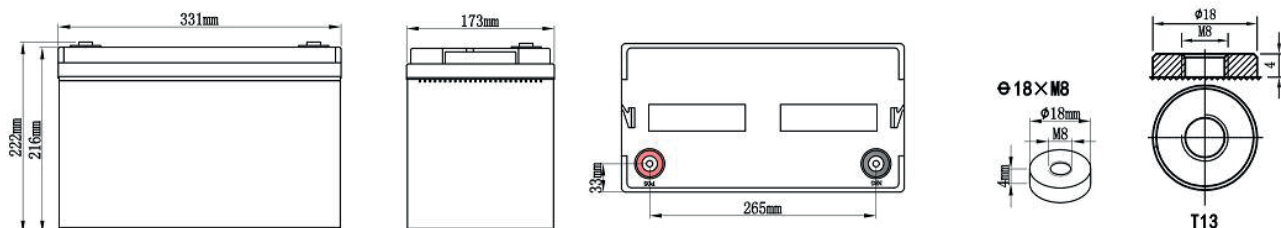
PSH-12400-W

[12V400-W/15MIN

## Physical Specifications

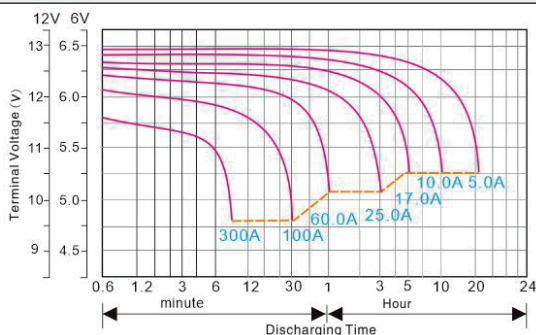
Nominal Voltage	Nominal Capacity (10HR)	Dimension				Weight $\pm 3\%$	Internal Resistance (In full charge status)	Standard Terminals
		L	W	H	TH			
12V	100AH	331 $\pm 3$ mm	173 $\pm 2$ mm	216 $\pm 3$ mm	222 $\pm 3$ mm	Approx 32.5kg (71.5lbs)	$\approx 4.5 \text{ m}\Omega$	T13 (standard)

## Dimensions(mm)

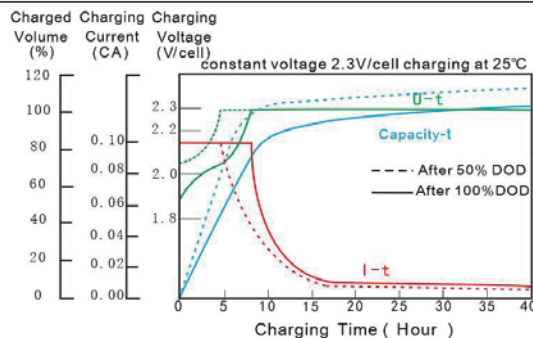


## Performance Characteristics

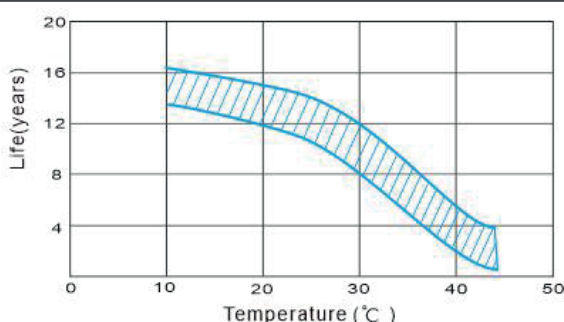
Discharge Characteristic (25°C/77°F)



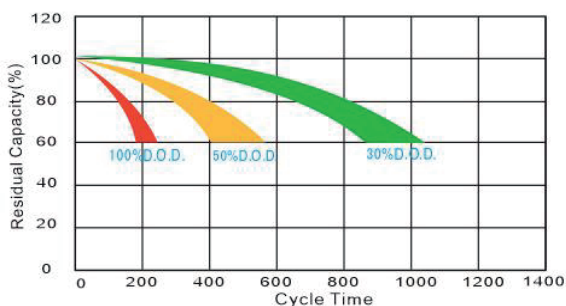
Charge Characteristics (25°C/77°F)



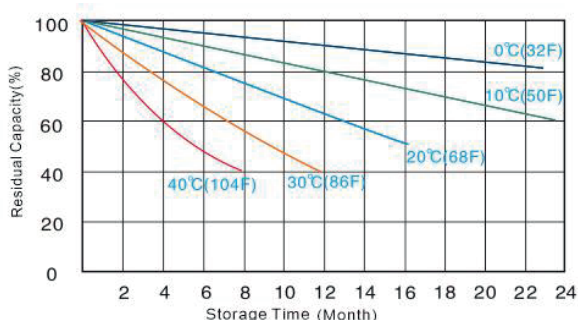
Temperature vs Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



Capacity Curve At Different Temperature

