



# General Purpose WPP1213(12V1.3Ah)

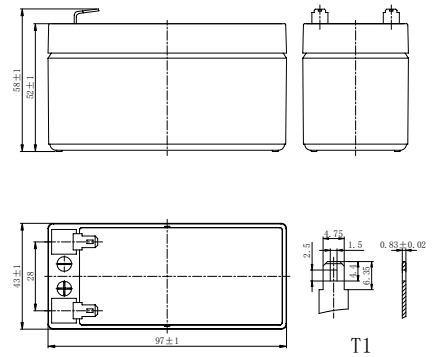


## Specifications

Rated Voltage	12V	
Nominal Capacity	1.3Ah	(C <sub>20</sub> , 1.75V/cell)
Dimension	Length	97±1mm (3.82 inches)
	Width	43±1mm (1.69 inches)
	Container Height	52±1mm (2.04 inches)
	Total Height	58±1mm (2.28 inches)
Approx Weight	0.52 Kg (1.15 lbs)	
Terminal	T1	
Container Material	ABS	
Rated Capacity (25°C)	1.30 Ah	(20hr, 0.065A, 1.75V/cell)
	1.12 Ah	(10hr, 0.120A, 1.75V/cell)
	1.06 Ah	(5hr, 0.211A, 1.75V/cell)
	0.92 Ah	(3hr, 0.306A, 1.75V/cell)
	0.79 Ah	(1hr, 0.789A, 1.60V/cell)
Max. Discharge Current	19.5A (5s)	
Internal Resistance (25°C)	Approx 145mΩ	
Operating Temp. Range	Discharge	-15 ~ 50°C (5 ~ 122°F)
	Charge	-20 ~ 40°C (-4 ~ 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 0.39A. Voltage 14.1V~14.7V at 25°C(77°F)Temp. Coefficient -30mV/°C	
	Initial Charging Current less than 0.39A. Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	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.	



## Layout



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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	3.73	2.28	1.78	1.48	1.10	0.813	0.714	0.523	0.411	0.296	0.236	0.205	0.177	0.141	0.118	0.064
1.80V/cell	4.01	2.42	1.86	1.54	1.14	0.835	0.731	0.534	0.418	0.301	0.240	0.208	0.180	0.143	0.119	0.064
1.75V/cell	4.23	2.52	1.92	1.59	1.17	0.853	0.746	0.543	0.426	0.306	0.243	0.211	0.182	0.145	0.120	0.065
1.70V/cell	4.43	2.62	1.99	1.63	1.20	0.872	0.760	0.553	0.432	0.311	0.246	0.214	0.184	0.146	0.122	0.066
1.67V/cell	4.58	2.69	2.04	1.67	1.22	0.886	0.771	0.560	0.437	0.314	0.249	0.215	0.186	0.147	0.123	0.066
1.60V/cell	4.86	2.80	2.11	1.72	1.25	0.908	0.789	0.572	0.446	0.319	0.253	0.219	0.189	0.149	0.124	0.067

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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	7.06	4.34	3.40	2.86	2.13	1.58	1.39	1.02	0.804	0.583	0.465	0.405	0.351	0.280	0.234	0.127
1.80V/cell	7.52	4.57	3.55	2.96	2.19	1.61	1.42	1.04	0.817	0.591	0.471	0.410	0.356	0.283	0.237	0.129
1.75V/cell	7.84	4.72	3.64	3.02	2.23	1.64	1.44	1.05	0.830	0.599	0.477	0.415	0.359	0.286	0.239	0.130
1.70V/cell	8.13	4.87	3.74	3.09	2.28	1.67	1.46	1.07	0.840	0.607	0.483	0.420	0.363	0.289	0.241	0.131
1.67V/cell	8.34	4.98	3.82	3.15	2.32	1.70	1.48	1.08	0.848	0.612	0.487	0.423	0.366	0.291	0.243	0.132
1.60V/cell	8.68	5.13	3.92	3.23	2.37	1.73	1.51	1.10	0.862	0.621	0.494	0.429	0.371	0.295	0.246	0.134



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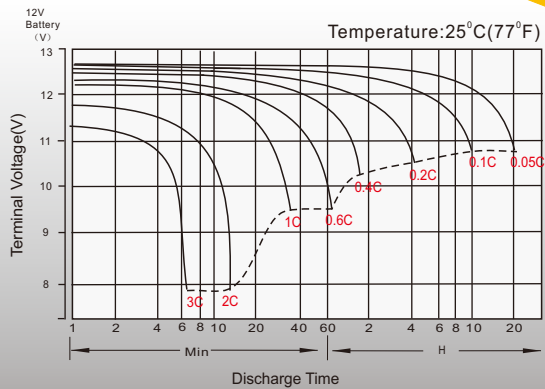
## Applications

- All purpose
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply
- Auto control system

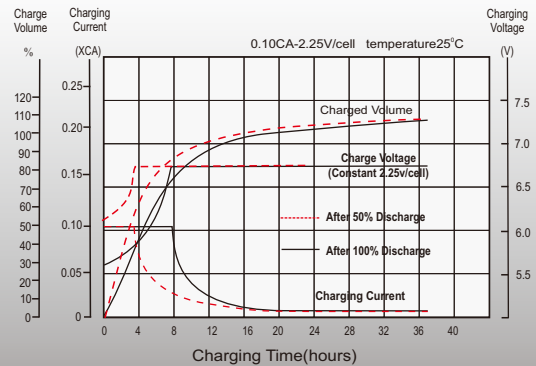
## General Features

- 5 years design life(25°C)
- Special exhaust structure and sealing technology, safe and reliable, flexible installation, convenient maintenance
- PbCaSn alloy for plate grids: less gassing, less self-discharging
- High quality AGM separator: extend cycle life and prevent micro short circuit
- High purity raw material: ensure low self discharge rate

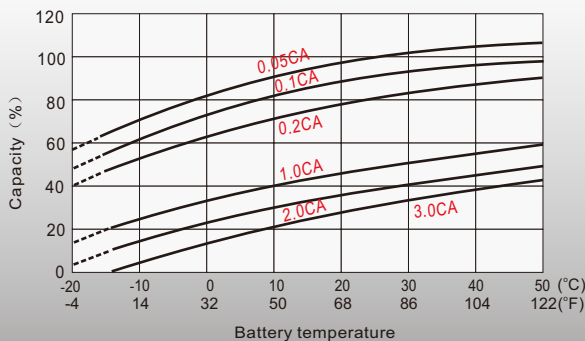
## Discharge Characteristics



## Float Charging Characteristics



## Temperature Effects in Relation to Battery Capacity



## Float Service Life

