JC12-2.9

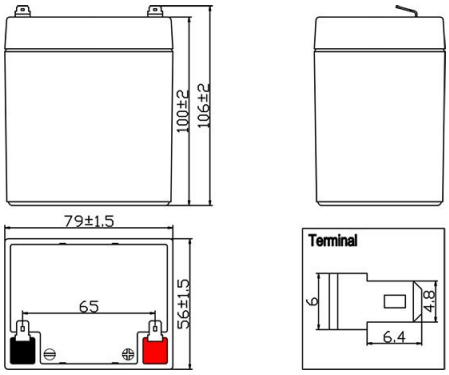
12V 2.9Ah



JAPCELL JC12-2.9 is an AGM battery. It is designed for stand-by applications such as Security and Alarm systems, Medical Facilities and Hospitals or UPS-systems.

SPECIFICATION

Nominal Voltage	12V (6 cells in series)	
Rated Capacity	2.9Ah	(C_{20},1.75V/cell)
Dimensions(mm)	79Length x 56Width x 100mm(max.106)Height	
Nominal Capacity @25℃ (Ah)	20 Hour rate (0.146A to 10.5 volts) 10 Hour rate (0.280A to 10.5 volts) 5 Hour rate (0.500A to 10.5 volts) 1 Hour rate (1.885A to 9.6 volts) 15 min rate (5.583A to 9.6 volts)	2.92Ah 2.80Ah 2.50Ah 1.88Ah 1.39Ah
Approx. Weight	1.05 kg	
Terminal	F1-A	
Max.Discharge Current	43.5A @25℃ (5s)	
Internal Resistance	40mΩ @25℃	
Floating Design Life	5 years @25℃	
Ambient Temperature	Charge：-15℃~50℃ Discharge：-20℃~60℃ Storage：-20℃~50℃	
Container Material	A.B.S, UL94-HB, UL94-V0, Optional	
Self Discharge	VRLA batteries can be stored for more than 6 months at 25℃. Self-Discharge ratio less than 3 % per month at 25℃. Please charge batteries before using.	



CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A), (25℃)

F.V/Time	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	11.44	7.497	5.583	2.973	1.885	1.062	0.758	0.512	0.339	0.290	0.155
1.70V/cell	10.38	6.946	5.264	2.886	1.843	1.045	0.740	0.504	0.334	0.283	0.150
1.75V/cell	9.324	6.511	4.974	2.799	1.820	1.037	0.732	0.500	0.331	0.280	0.146
1.80V/cell	8.367	6.090	4.684	2.712	1.794	1.028	0.724	0.494	0.326	0.276	0.141

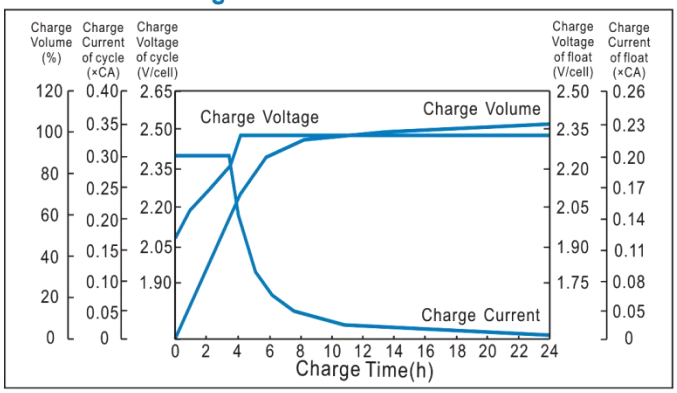
JC12-2.9

12V 2.9Ah

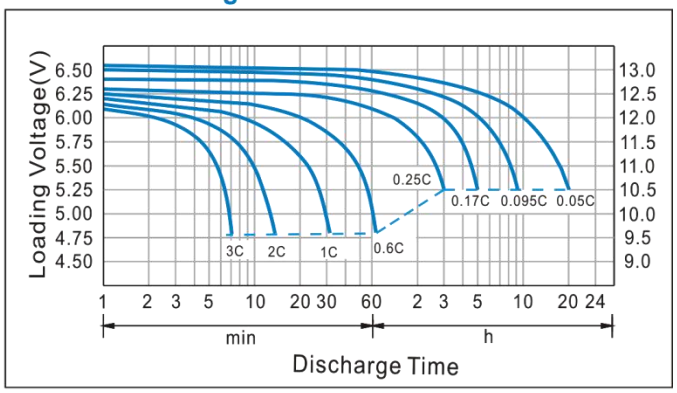
CONSTANT WATTAGE DISCHARGE CHARACTERISTICS (WATT), (25℃)

F.V/Time	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	20.69	13.68	10.28	5.673	3.739	2.106	1.512	1.021	0.676	0.579	0.310
1.70V/cell	19.12	12.91	9.869	5.555	3.671	2.082	1.477	1.006	0.666	0.566	0.300
1.75V/cell	17.40	12.32	9.408	5.434	3.627	2.067	1.463	1.000	0.661	0.560	0.294
1.80V/cell	15.76	11.62	8.938	5.310	3.578	2.051	1.447	0.989	0.653	0.551	0.282

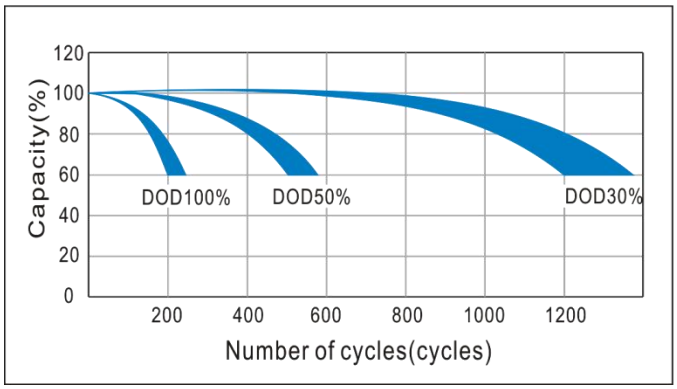
Charge Characteristics Curve



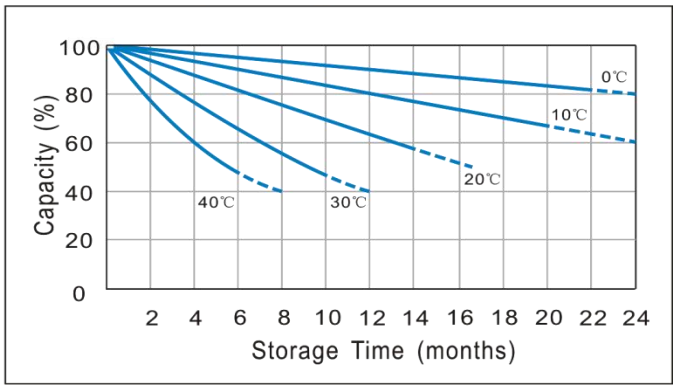
Discharge Characteristics Curve



Cycle service life in relation to depth of discharge



Capacity Storage Characteristics



CAPACITY FACTORS WITH DIFFERENT TEMPERATURE

Battery type		-20℃	-10℃	0℃	5℃	10℃	20℃	25℃	30℃	40℃	45℃
GEL Battery	**6V & 12V**	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	**6V & 12V**	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

CHARGING METHOD

☼ Charging Procedure：

Application	Charging method	Charge voltage at 25℃	Temperature compensation coefficient of charging voltage	Max.charging current	Temperature
For standby power source	Constant voltage charging (With current restriction)	2.25~2.30 V/cell	-3mV/℃/cell	0.2CA	-15~50℃
For cycle service		2.45~2.50 V/cell	-4mV/℃/cell	0.3CA	

☼ Charge the batteries at least once every six months, if they are stored at 25℃.

Constant Voltage: -0.2C×2h+2.45-2.50V/cell×24h, Max. Current 0.25CA

Constant Current: -0.2C×2h+0.1C×12h

Fast: -0.2C×2h+0.3C×4h