JC12-18

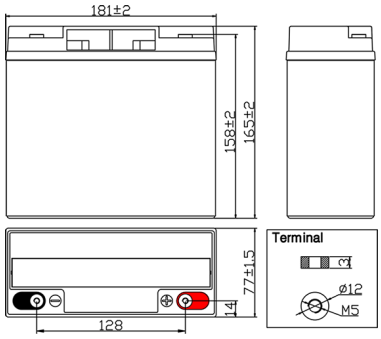
12V 18Ah



JAPCELL JC12-18 is an AGM battery. It is designed for stand-by applications such as Medical Facilities and Hospitals or UPS-systems.

SPECIFICATION

Nominal Voltage	12V (6 cells in series)
Rated Capacity	18Ah (C_{20},1.75V/cell)
Dimensions(mm)	181Length x 77Width x 165mm(max.165)Height
Nominal Capacity @25℃ (Ah)	20 Hour rate (0.909A to 10.5 volts) 18.1Ah 10 Hour rate (1.737A to 10.5 volts) 17.3Ah 5 Hour rate (3.105A to 10.5 volts) 15.5Ah 1 Hour rate (11.70A to 9.6 volts) 11.7Ah 15 min rate (34.65A to 9.6 volts) 8.66Ah
Approx. Weight	5.0 kg
Terminal	F10
Max.Discharge Current	270A @25℃ (5s)
Internal Resistance	15mΩ @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	71.01	46.53	34.65	18.45	11.70	6.592	4.707	3.175	2.102	1.800	0.963
1.70V/cell	64.44	43.11	32.67	17.91	11.44	6.489	4.590	3.128	2.070	1.755	0.929
1.75V/cell	57.87	40.41	30.87	17.37	11.30	6.435	4.545	3.105	2.052	1.737	0.909
1.80V/cell	51.93	37.80	29.07	16.83	11.13	6.381	4.491	3.069	2.025	1.710	0.873

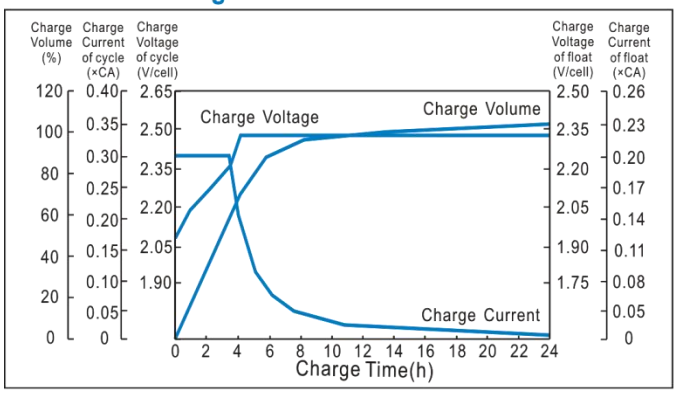
JC12-18

12V 18Ah

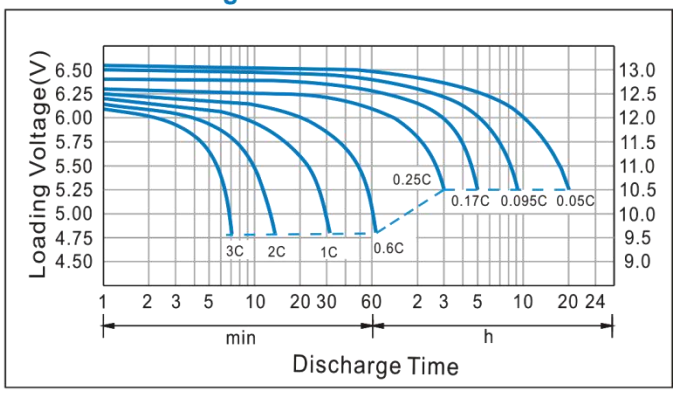
CONSTANT WATTAGE DISCHARGE CHARACTERISTICS (WATT), (25℃)

F.V/Time	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	128.4	84.92	63.81	35.21	23.21	13.07	9.383	6.335	4.194	3.594	1.926
1.70V/cell	118.7	80.11	61.26	34.48	22.78	12.92	9.165	6.246	4.133	3.510	1.861
1.75V/cell	108.0	76.44	58.40	33.73	22.51	12.83	9.082	6.205	4.101	3.477	1.826
1.80V/cell	97.80	72.14	55.48	32.96	22.21	12.73	8.982	6.138	4.050	3.423	1.753

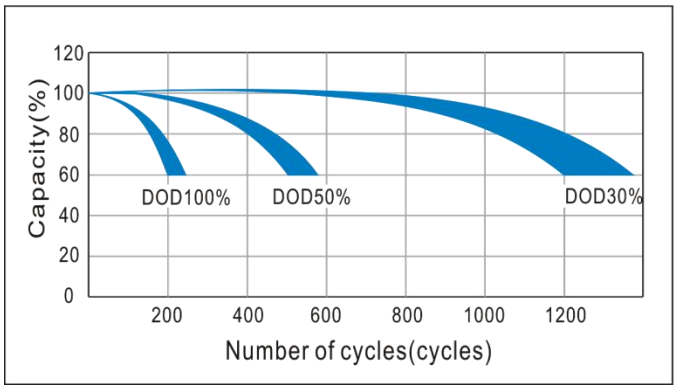
Charge Characteristics Curve



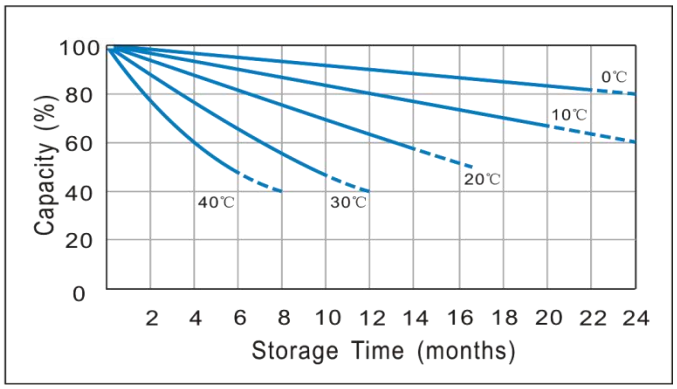
Discharge Characteristics Curve



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