

JAPCELL®

JC6-12

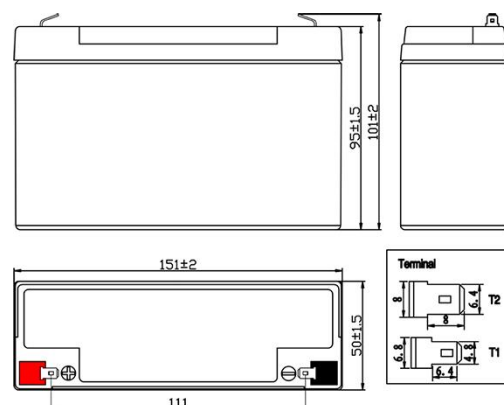
6V 12Ah



JAPCELL JC6-12 is an AGM battery. It is designed for stand-by applications such as Security and Alarm systems, Emergency lights, Electronic scales.

SPECIFICATION

Nominal Voltage	6V (3 cells in series)	
Rated Capacity	12Ah	(C ₂₀ , 1.75V/cell)
Dimensions(mm)	151Length x 50Width x 95mm(max.101)Height	
Nominal Capacity @25°C (Ah)	20 Hour rate (0.606A to 5.25 volts)	12.1Ah
	10 Hour rate (1.158A to 5.25 volts)	11.5Ah
	5 Hour rate (2.070A to 5.25 volts)	10.3Ah
	1 Hour rate (7.332A to 4.80 volts)	7.33Ah
	15 min rate (21.71A to 4.80 volts)	5.42Ah
Approx. Weight	1.65 kg	
Terminal	F2	
Max.Discharge Current	180A @25°C (5s)	
Internal Resistance	12mΩ @25°C	
Floating Design Life	5 years @25°C	
Ambient Temperature	Charge: -15°C~50°C	
	Discharge: -20°C~60°C	
	Storage: -20°C~50°C	
Container Material	A.B.S, UL94-HB, UL94-V0, Optional	



Self Discharge VRLA batteries can be stored for more than 6 months at 25°C.
Self-Discharge ratio less than 3% per month at 25°C.
Please charge batteries before using.

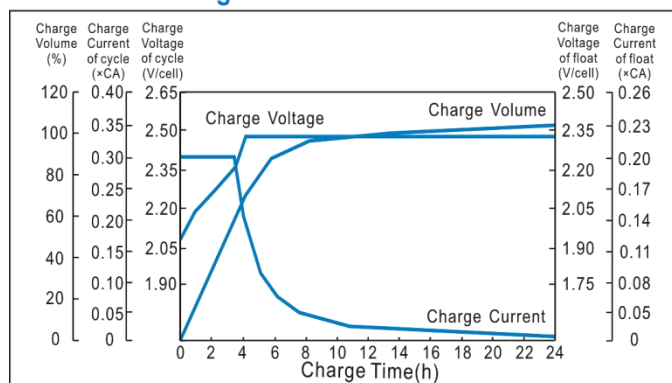
CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A), (25°C)

F.V/Time	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	44.50	29.16	21.71	11.56	7.332	4.131	3.138	2.117	1.402	1.200	0.642
1.70V/cell	40.38	27.02	20.47	11.22	7.168	4.066	3.060	2.086	1.380	1.170	0.619
1.75V/cell	36.27	25.32	19.35	10.89	7.078	4.033	3.030	2.070	1.368	1.158	0.606
1.80V/cell	32.54	23.69	18.22	10.55	6.977	3.999	2.994	2.046	1.350	1.140	0.582

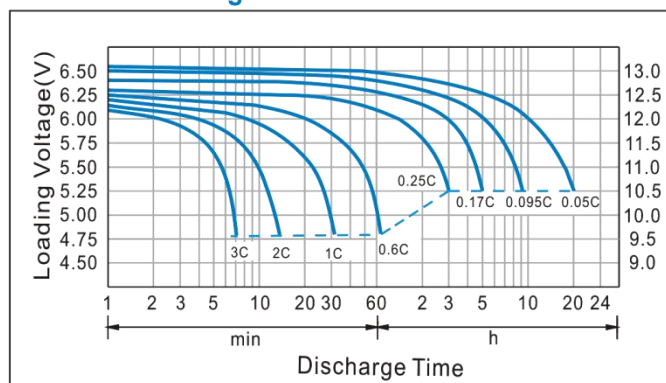
CONSTANT WATTAGE DISCHARGE CHARACTERISTICS (WATT), (25°C)

F.V/Time	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	80.47	53.21	39.99	22.06	14.54	8.193	6.255	4.223	2.796	2.396	1.284
1.70V/cell	74.37	50.20	38.39	21.61	14.28	8.099	6.110	4.164	2.755	2.340	1.240
1.75V/cell	67.70	47.90	36.59	21.14	14.11	8.038	6.055	4.137	2.734	2.318	1.217
1.80V/cell	61.29	45.20	34.76	20.65	13.92	7.978	5.988	4.092	2.700	2.282	1.169

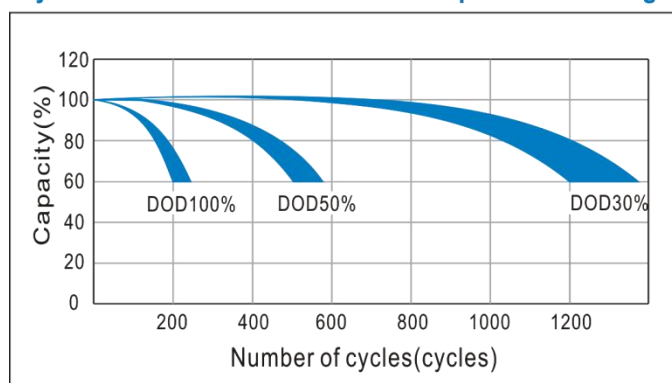
Charge Characteristics Curve



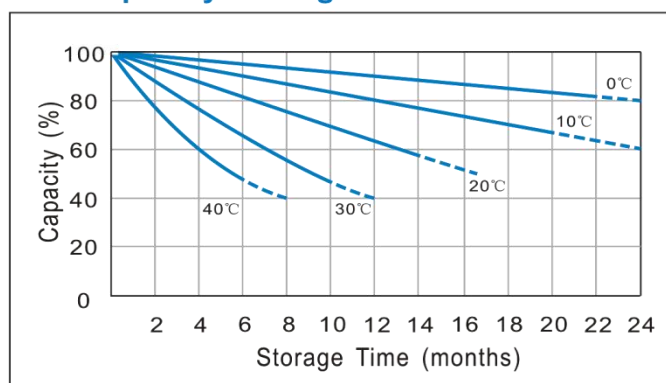
Discharge Characteristics Curve



Cycle service life in relation to depth of discharge



Capacity Storage Characteristics



CAPACITY FACTORS WITH DIFFERENT TEMPERATURE

Battery type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
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°C	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/°C/cell	0.2CA	-15~50°C
For cycle service		2.45~2.50 V/cell	-4mV/°C/cell	0.3CA	

⚙ Charge the batteries at least once every six months, if they are stored at 25°C.

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