



VRLA BATTERY

General purpose application series

UP12-18 (12v18AH)



Characteristics

Nominal Voltage		12V
Nominal Capacity (20 hour rate)		18Ah
Capacity 25°C (77°F)	10 hour rate (1.71A)	17.1Ah
	5 hour rate (3.22A)	16.1Ah
	1 hour rate (11.8A)	11.8Ah
Internal Resistance	Full Charged Battery 25°C	≤12mΩ
Capacity affected by Temperature (10hour)	40°C (104°F)	102%
	25°C (77°F)	100%
	0°C (32°F)	85%
	-15°C (5°F)	65%
Self-Discharge 25°C (77°F)	after 3 month storage	90%
	after 6 month storage	80%
Capacity	after 12 month storage	62%
Charge (Constant Voltage) 25°C (77°F)	Float	Initial Charging Current Less than 5.1A Voltage 13.6-13.8V
	Cycle	Initial Charging Current Less than 5.1A Voltage 14.4-15.0V

Packaging

Battery Dimensions	Length	181mm
	Width	77mm
	Height	167mm
	Total Height	167mm
Box Dimensions	Length	341mm
	Width	195mm
	Height	213mm
Quantity Per Box		2pcs per box
Net weight Per Cell		4.8kg ± 50g
Net weight Per Box		9.6kg
Gross Weight		10kg

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

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	56.10	37.40	28.14	18.70	13.09	11.22	7.01	4.81	3.20	2.15	1.78	0.94
1.65V	55.08	36.72	27.63	18.36	12.85	11.02	6.89	4.72	3.15	2.11	1.75	0.92
1.70V	54.06	36.04	27.12	18.02	12.61	10.81	6.76	4.63	3.09	2.08	1.72	0.90
1.75V	53.04	35.36	26.61	17.68	12.38	10.61	6.63	4.54	3.03	2.04	1.68	0.88
1.80V	51.00	34.00	25.58	17.00	11.90	10.20	6.38	4.37	2.91	1.96	1.62	0.85

Discharge Constant Power per Cell (Watts at 77°F 25°C)

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	107.99	72.00	54.17	36.00	25.20	21.60	13.50	9.25	6.17	4.15	3.43	1.80
1.65V	106.03	70.69	53.19	35.34	24.74	21.21	13.25	9.08	6.06	4.07	3.36	1.77
1.70V	104.07	69.38	52.20	34.69	24.28	20.81	13.01	8.91	5.94	4.00	3.30	1.73
1.75V	102.10	68.07	51.22	34.03	23.82	20.42	12.76	8.75	5.83	3.92	3.24	1.70
1.80V	98.18	65.45	49.25	32.73	22.91	19.64	12.27	8.41	5.61	3.77	3.11	1.64

Note The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Contact us www.upowa.co for the latest information.

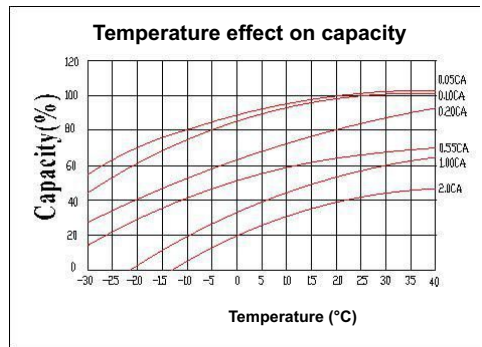
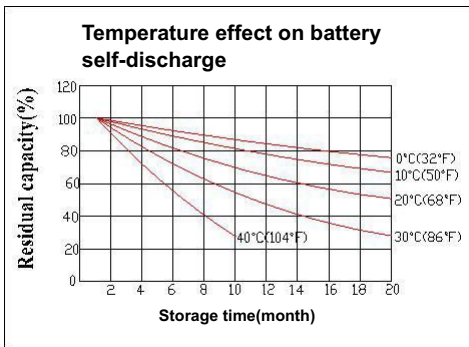
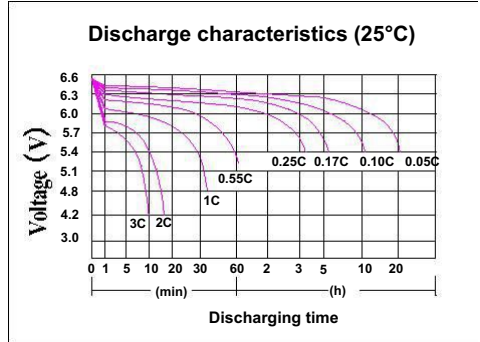
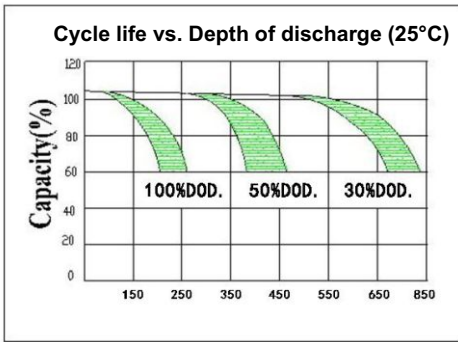
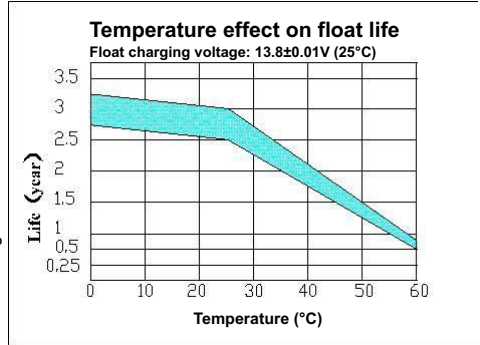
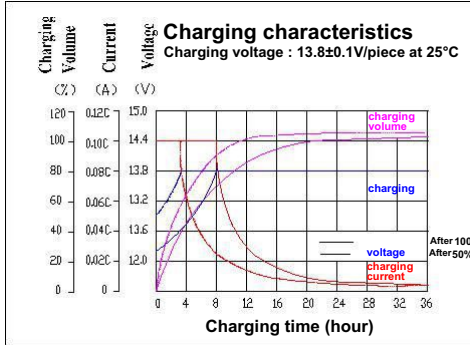
BATTERIES

SOLAR & INVERTERS

ACCESSORIES

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Battery Construction

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Si-Rubber	Copper	Fiberglass	Sulfuric acid