

OPTG12-150_(12V150AH)

Features

Gel VRLA Battery-one way valve with flame arrestor
Maintenance Free
Compliance of IEC 60896 and 61427

Tubular Plate
15 years design life (at 25°C)
Stable quality and high reliability

Application

- Solar application
- Alarm and security system
- Backup power for testing and measuring instruments
- UPS systems
- Telecom power supply
- DC power supply



Specifications

Nominal Voltage	12V (6 cells)	Operating Temp.Range	Discharge: -15 - 50°C (5 - 122°F)
Nominal Capacity	159AH (20hr, 1.80V/cell, 25°C/76°F)		Charge : 0 - 40°C (32 - 122°F)
	150AH (10hr, 1.80V/cell, 25°C/77°F)		Storage : -15 - 40°C (5 - 104°F)
	127.5AH (5hr, 1.75V/cell, 25°C/77°F)	Nominal Operating Temp.Range	25 ± 3°C (77 ± 5°F)
	90AH (1hr, 1.60V/cell, 25°C/77°F)		
Dimension	Length	Cycle Use	14.4~14.8V (25°C/77°F) Temp.Coefficient -30mV/°C
	Width		Initial Charging Current Less than 45A
	Container Height	Standby Use	13.5~13.8V (25°C/77°F) Temp.Coefficient -20mV/°C
	Total Height(with Terminal)		No limit on Initial Charging Current
Approx Weight	Approx 51.5Kg	Capacity affected by Temperature	40°C (104°F) 103%
Terminal	T3		25°C (77°F) 100%
Container Material	PP		0°C (32°F) 86%
Max. Discharge Current	1350A (5S)	Self Discharge	Sunstone OPTG series batteries may be stored for up to 9 months at 25°C (77°F) and then a freshening charge is required.
Internal Resistance	Approx 5.6 mΩ		For higher temperatures the time interval will be shorter.

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

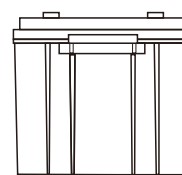
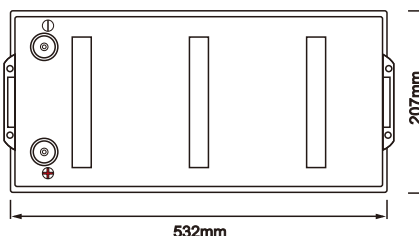
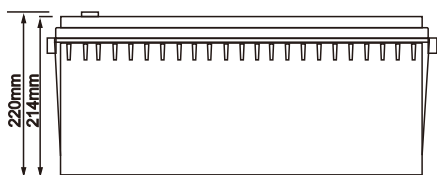
F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	\	255.4	208.9	130.2	100.7	83.6	49.6	37.2	25.9	15.7	8.3
1.75V/cell	\	280.5	226.5	135.6	104.5	86.3	51.0	38.2	26.5	16.0	8.4
1.70V/cell	\	299.6	244.7	140.2	107.9	88.8	52.4	39.0	26.9	16.2	8.5
1.65V/cell	\	319.5	258.6	147.9	112.4	92.3	53.9	40.1	27.5	16.4	8.6
1.60V/cell	\	341.4	270.4	154.5	116.5	95.4	55.4	40.8	28.0	16.5	8.7

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

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	\	467.9	396.3	244.7	191.3	162.8	95.5	72.2	51.1	31.2	16.3
1.75V/cell	\	501.5	416.2	254.7	199.2	166.5	98.0	73.8	51.9	31.6	16.5
1.70V/cell	\	527.8	437.8	263.3	205.7	168.9	100.4	75.2	52.5	31.9	16.7
1.65V/cell	\	552.4	454.0	277.6	211.6	174.4	102.5	76.6	53.6	32.1	16.9
1.60V/cell	\	574.9	473.6	286.2	217.2	179.9	104.6	78.0	54.4	32.3	17.0

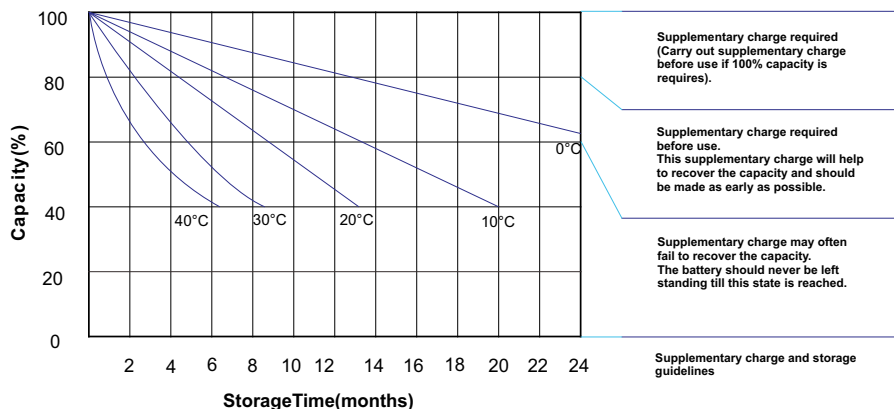
Note: The above characteristics data are average values obtained within three charge/discharge cycles, not the minimum values.

Dimensions unitmm[inches]

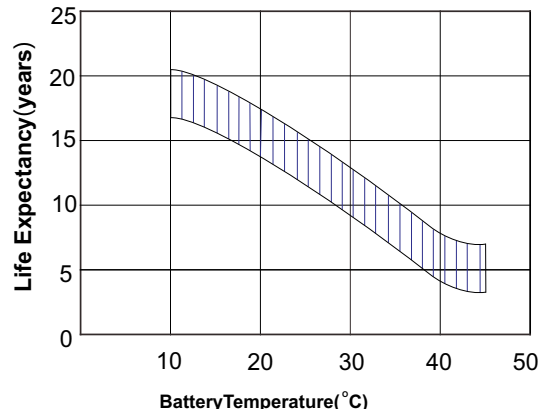


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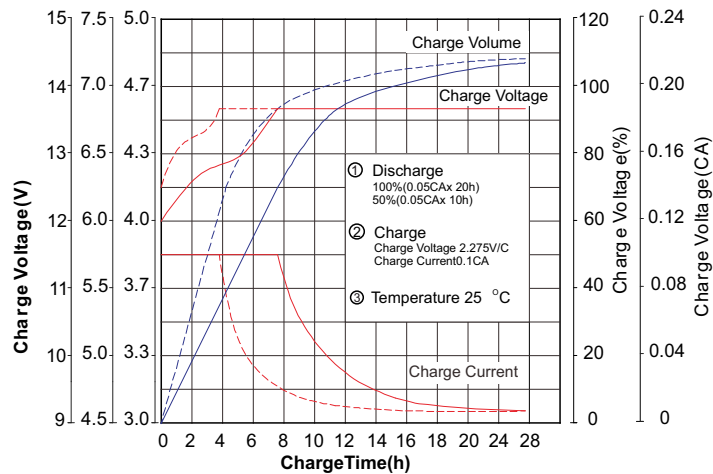
Storage characteristics



Effect of temperature on long term float life

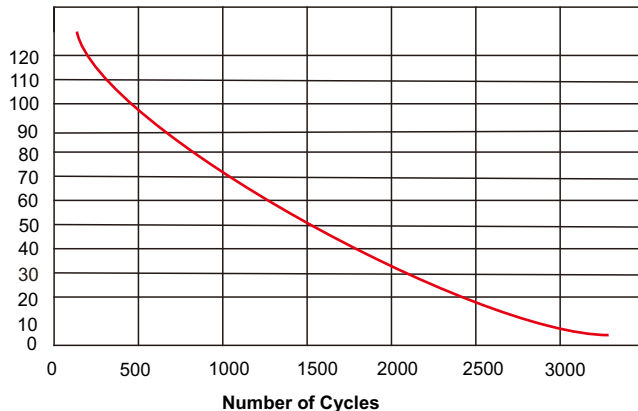


Charge characteristic Curve for standby use

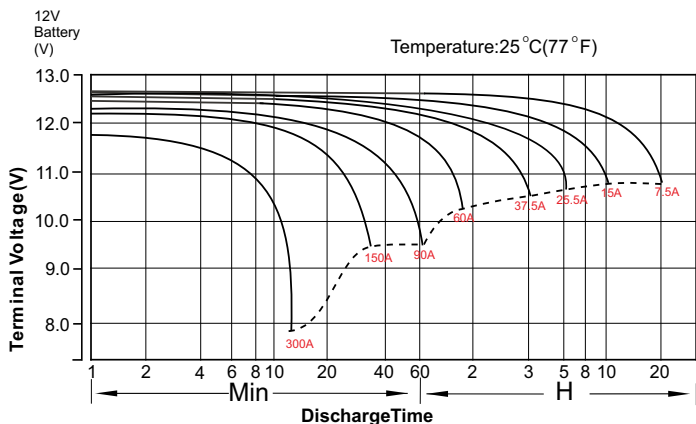


Cycle Life in Relation to Depth of Discharge

Testing condition : Acc.to IEC 60896 (25°C-30°C)
Discharging: current 0.17C(FV 1.7V/cell);
Charging: current 0.25C max, voltage 2.45V/cell;
Charging volume:125% of discharged capacity.



Discharge characteristic Curve



Temperature Effects in Relation to Battery Capacity

