

VTM SERIES-General Purpose

VTM2-600 (2V600AH)

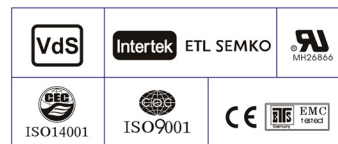
Specification

Nominal Voltage	2V
Nominal Capacity(10HR)	600.0AH
Dimension	Length 300±2mm (11.81 inches)
	Width 175±2mm (6.89 inches)
	Container Height 330±2mm (12.99 inches)
	Total Height (with Terminal) 350±2mm (13.78 inches)
Approx Weight	Approx 35.0 kg (77.18lbs)
Terminal	T11
Container Material	ABS
Rated Capacity	630.0 AH/31.5A (20hr ,1.80V/cell,25°C/77°F)
	600.0 AH/60.0A (10hr,1.80V/cell,25°C/77°F)
	513.0 AH/102.6A (5hr,1.75V/cell,25°C/77°F)
	450.0AH/150.0A (3hr,1.75V/cell,25°C/77°F)
	360.0 AH/360.0A (1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	4800A (5s)
Internal Resistance	Approx 0.55mΩ
Operating Temp.Range	Discharge : -15~50°C (5~122°F)
	Charge : 0~40°C (32~104°F)
	Storage : -15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)
Cycle Use	Initial Charging Current less than 180.0A.Voltage 2.4V~2.5V at 25°C(77°F)Temp. Coefficient -5mV/°C
Standby Use	No limit on Initial Charging Current Voltage 2.25V~2.3V at 25°C(77°F)Temp. Coefficient -3mV/°C
Capacity affected by Temperature	40° C (104°F) 103%
	25° C (77°F) 100%
	0° C (32°F) 86%



Applications

- ♦ Tele-communication central station (wired or cellular)
- ♦ Power system communication, military communication, etc.
- ♦ Network communication including: data transmission, television signal transmission, etc.
- ♦ Uninterruptable Power System (UPS- for Telecom)



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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	700.0	616.8	542.2	479.9	401.1	325.8	265.9	178.2	136.2	109.8	94.0	82.7	67.1	57.3	30.4
1.80V/cell	852.0	721.8	617.8	537.9	440.7	350.4	283.3	187.5	147.6	113.6	97.8	86.2	70.3	60.0	31.5
1.75V/cell	\	827.1	699.0	596.1	479.4	379.2	304.8	198.9	150.0	119.9	102.6	90.3	72.1	61.2	31.9
1.70V/cell	\	935.0	772.6	655.6	520.9	405.1	322.7	210.0	156.6	124.8	106.7	93.5	74.4	62.7	32.6
1.65V/cell	\	\	822.0	692.9	545.8	421.1	335.3	216.9	161.6	128.6	109.7	95.2	75.8	63.7	33.1
1.60V/cell	\	\	923.9	772.6	597.0	455.5	360.0	227.7	168.4	134.0	114.8	99.4	78.6	65.8	34.1

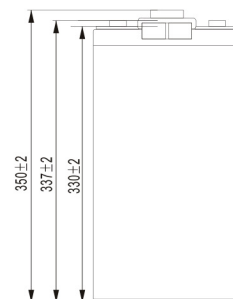
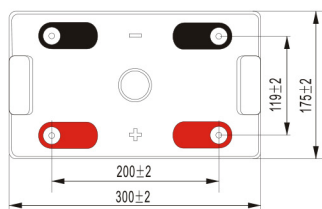
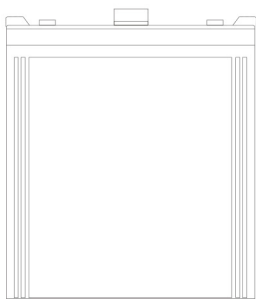
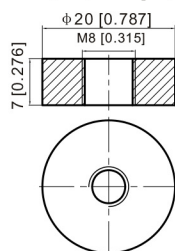
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	1286.9	1145.5	1017.1	909.5	768.5	629.5	515.6	347.8	266.9	215.8	185.2	163.4	133.1	114.0	60.5
1.80V/cell	1549.7	1324.8	1143.5	1004.5	831.6	671.7	546.3	363.6	287.6	222.0	191.8	169.6	139.0	119.2	62.6
1.75V/cell	\	1493.9	1277.9	1102.5	897.1	720.2	585.2	384.2	291.1	233.5	200.5	177.2	142.3	121.4	63.4
1.70V/cell	\	1650.7	1392.9	1203.4	969.4	766.4	617.5	404.8	303.3	242.6	208.3	183.2	146.7	124.3	64.7
1.65V/cell	\	\	1470.6	1262.5	1007.5	789.5	637.1	415.7	311.7	249.0	213.3	185.9	149.0	126.1	65.7
1.60V/cell	\	\	1625.9	1392.4	1094.3	849.5	680.4	434.3	323.3	258.7	222.5	193.5	154.3	129.9	67.6

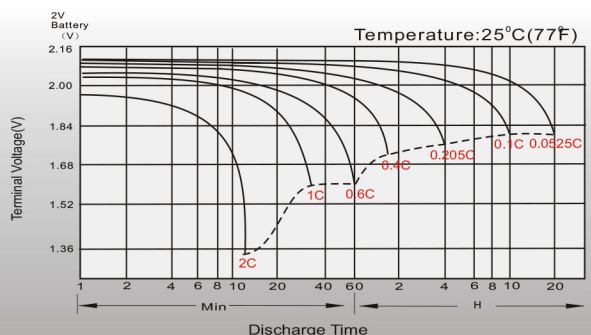
Dimensions

T11 Terminal

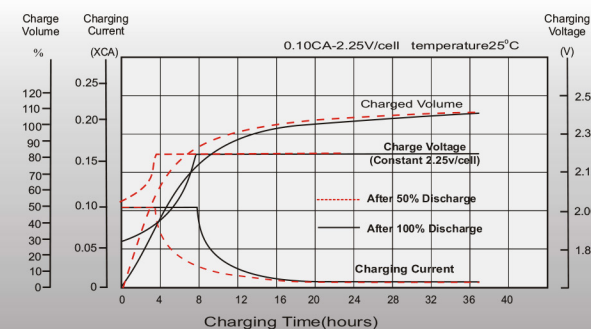
Unit: mm [inches]



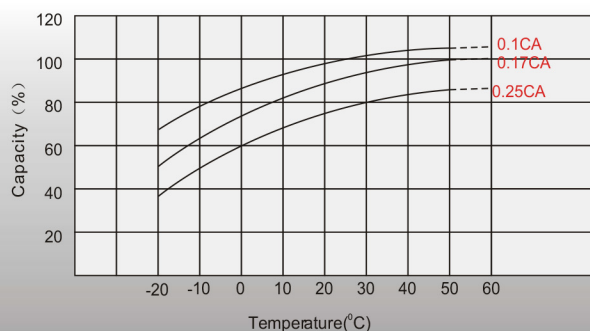
Discharge Characteristics



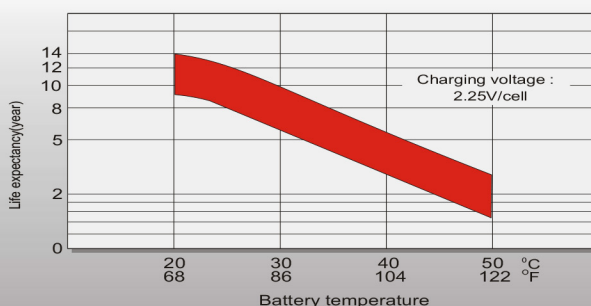
Float Charging Characteristics



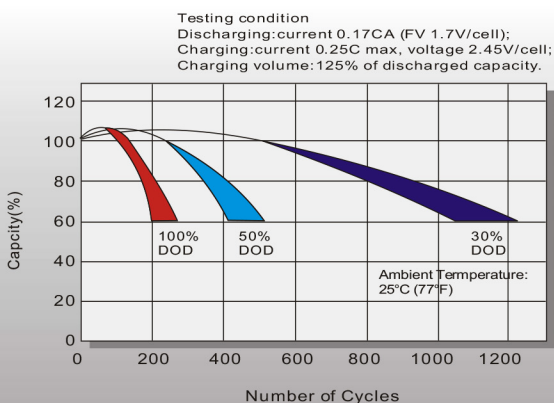
Temperature Effects in Relation to Battery Capacity



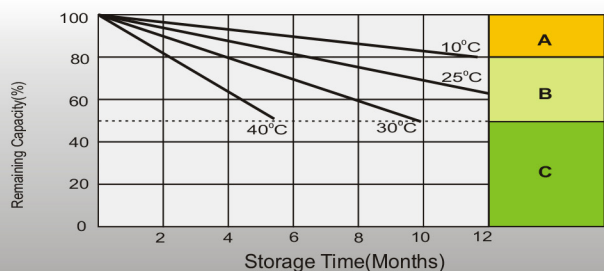
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use. Optional charging way as below:
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
3. Charged for 8-10 hours at limited current 0.05CA.

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.