

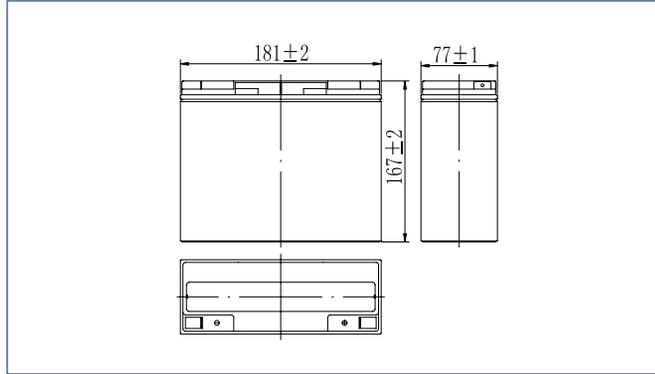
12V
18AH

viotech
battery

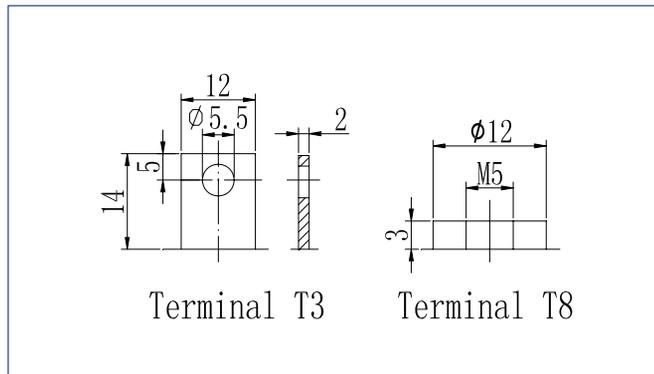
SPECIFICATIONS

Model	VT18-12	
Nominal Voltage	12V	
Rated capacity (20 hour rate)	18Ah	
Dimensions	Length	181±2mm(7.13inch)
	Width	77±1mm(3.03inch)
	Height	167±2mm(6.57inch)
	Total Height	167±2mm(6.57inch)
Approx. Weight	5.0kg(11.0lbs)±4%	

OUTER DIMENSIONS (MM)



TERMINAL TYPE (MM)



CHARACTERISTICS

Capacity (25 °C)	20HR(10.5V)	18Ah
	10HR(10.8V)	15.5Ah
	1HR(9.60V)	11.0Ah
Terminal type		T3/T8
Internal resistance (Fully charged,25 °C)		Approx.18m Ω
Capacity affected by temperature (20HR)	40 °C	102%
	25 °C	100%
	0 °C	85%
	-15 °C	65%
Self-discharge (25 °C)	3 months	Remaining Capacity:91%
	6 months	Remaining Capacity:82%
	12 months	Remaining Capacity:65%
Nominal operating temperature		25°C± 3°C(77°F± 5°F)
Operating temperature range	Discharge	-15°C~50°C(5°F~122°F)
	Charge	-10°C~50°C(14°F~122°F)
	Storage	-20°C~50°C(-4°F~122°F)
Float charging voltage(25°C)		13.60 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 14.90V Temperature compensation: -30mV/°C
Maximum charging current		5.4A
Terminal material		Copper
Maximum discharge current		210A(5 sec.)
Designed floating life(20°C)		10 years

CONSTANT CURRENT DISCHARGE CHARACTERISTICS UNIT: A (25°C)

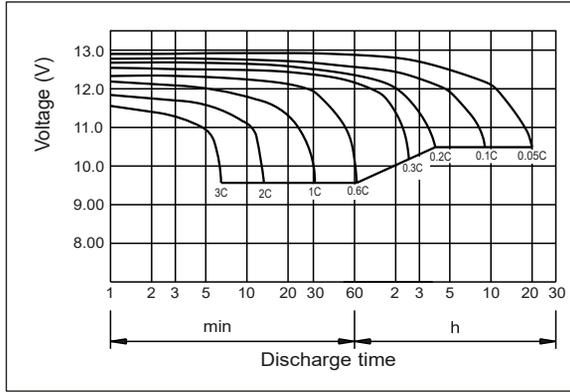
F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	61.80	40.6	32.13	18.00	11.03	6.08	4.35	3.40	2.94	1.93	1.61	0.91
9.90V	59.50	39.4	31.29	17.64	10.87	6.05	4.33	3.38	2.92	1.92	1.60	0.91
10.2V	57.20	37.7	30.17	17.10	10.59	5.99	4.30	3.35	2.90	1.90	1.59	0.90
10.5V	55.30	36.1	29.14	16.69	10.38	5.90	4.27	3.33	2.88	1.89	1.58	0.90
10.8V	53.50	34.1	27.60	16.07	10.06	5.77	4.14	3.23	2.79	1.83	1.55	0.85

CONSTANT POWER DISCHARGE CHARACTERISTICS UNIT: W (25°C)

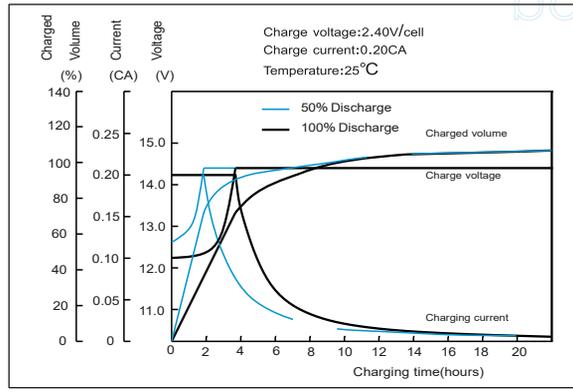
F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	725.00	458	366	206.3	127.8	71.2	51.7	40.5	35.1	23.13	19.29	10.94
9.90V	715.00	445	357	202.2	125.9	70.8	51.4	40.2	34.9	23.00	19.22	10.89
10.2V	688.00	426	344	196.0	122.7	70.1	51.0	39.9	34.6	22.84	19.12	10.82
10.5V	658.00	407	332	191.2	120.2	69.1	50.7	39.7	34.4	22.68	19.01	10.80
10.8V	640.00	384	314.6	184.2	116.5	67.3	49.2	38.5	33.4	22.00	18.63	10.15

Note: The above characteristics data can be obtained within three charge/discharge cycles

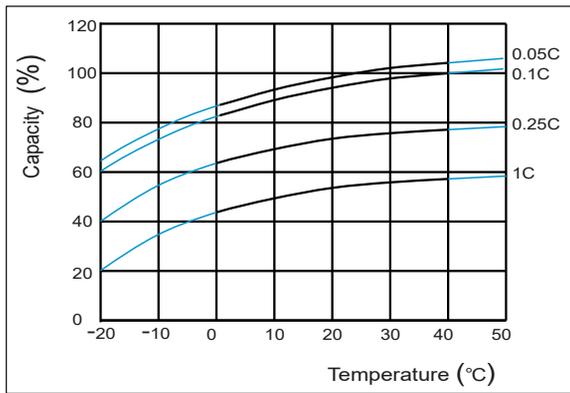
DISCHARGE CHARACTERISTICS (25°C)



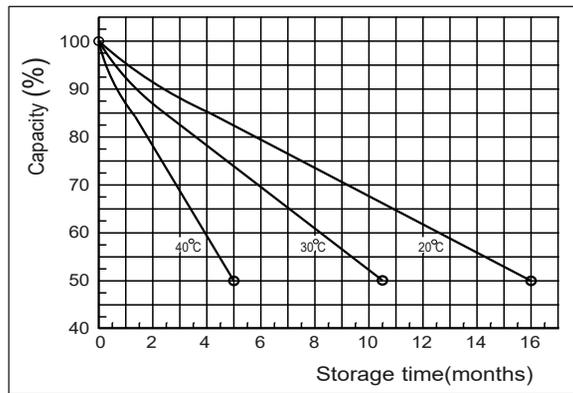
CHARGING CHARACTERISTICS (25°C)



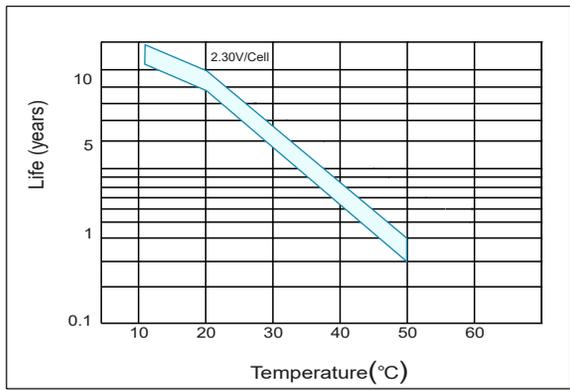
TEMPERATURE EFFECTS ON CAPACITY



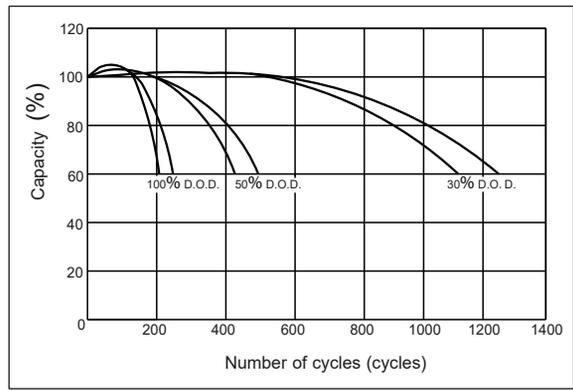
SELF-DISCHARGE CHARACTERISTICS



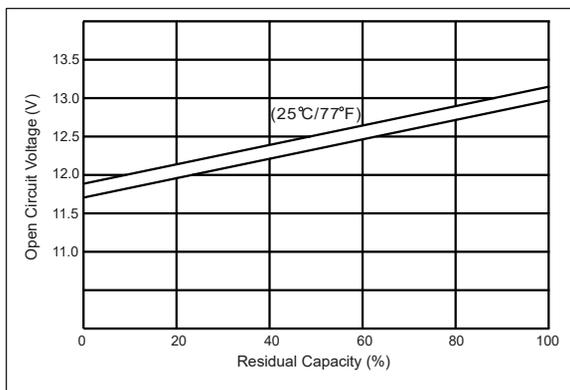
FLOATING LIFE ON TEMPERATURE



CYCLE LIFE ON D.O.D (25°C)



THE RELATIONSHIP FOR OCV AND CAPACITY (25°C)



THE RELATIONSHIP FOR CHARGING VOLTAGE AND TEMPERATURE

