

### ● FT General Series Battery

FT General Series VRLA batteries are designed with AGM (Absorbent Glass Mat) technology, High performance plates and electrolyte to give extra power output for common power backup system. FT series Batteries are the general purpose batteries with 12 years floating design life at 20 °C. Meet with IEC, BS, JIS and Eurobat standard.

### ● Application

- \* Emergency Power System
- \* Communication equipment
- \* Telecommunication systems
- \* Uninterruptible power supplies
- \* Electric bicycle and wheelchairs, etc
- \* Power tools
- \* Alarm system
- \* Marine equipment
- \* Medical equipment
- \* Fire and Security System



### ● General Features

- \* Safety Sealing
- \* Non-spillable construction
- \* High Reliability and Stability
- \* Sealed and Maintenance-free
- \* Safety and Quality certification
- \* Long Life and low self-discharge design

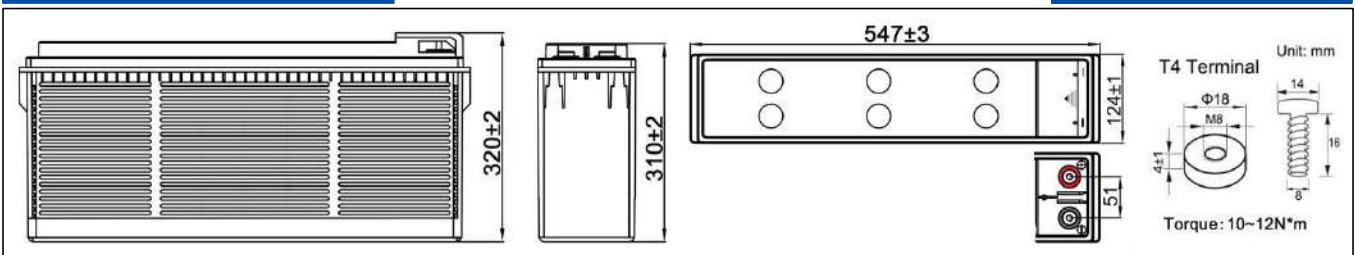
### ● Construction

- \* Positive . . . . . Lead dioxide
- \* Electrolyte . . . Sulfuric acid
- \* Separator . . . . Fiber glass
- \* Container . . . . . ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
- \* Negative . . . . . Lead
- \* Safety Valve . . . EPDR
- \* Terminal . . . . . Copper

### ● Specification

Battery Model	Nominal Voltage		12V (6 cells per unit)	
	Rated capacity (10 Hour rate)		200Ah	
Dimension	Length	Width	Height	Total Height
	547mm (21.53 inches)	124mm (4.88 inches)	310mm (12.20 inches)	320mm (12.60 inches)
Approx Weight	56.2kg(123.90lbs) ± 3%			
Internal Resistance	Full charged at 20°C(68°F): Approx 3.95mΩ			
Maximum Charge Current	60A			
Max.discharge current	1600A( 5Sec.)			
Operating Temperature Range	Nominal Operating Temperature	Discharge	Charge	Storage
	20°C(68°F)	-15°C~ 50°C (5°F~122°F)	-15°C~ 40°C (5°F~104°F)	-15°C~ 40°C (5°F~104°F)
Capacity @ 20°C (68°F)	10 hour rate(20.0A,10.8V)	5 hour rate(35.4A,10.8V)	3 hour rate(52.3A,10.5V)	1 hour rate(132A,9.6V)
	200.0Ah	177.0Ah	156.9Ah	132.0Ah
Capacity affected by Temp.(10HR)	40°C (104°F)	20°C (68°F)	0°C (32°F)	-15°C (5°F)
	102%	100%	85%	65%
Charge method	Float Charging Voltage		Equalization Charging Voltage	
	13.5 ~ 13.8 VDC/Unit at 20°C (68°F)		14.4~ 14.9 VDC/Unit at 20°C (68°F)	

### ● Outer dimension (mm)

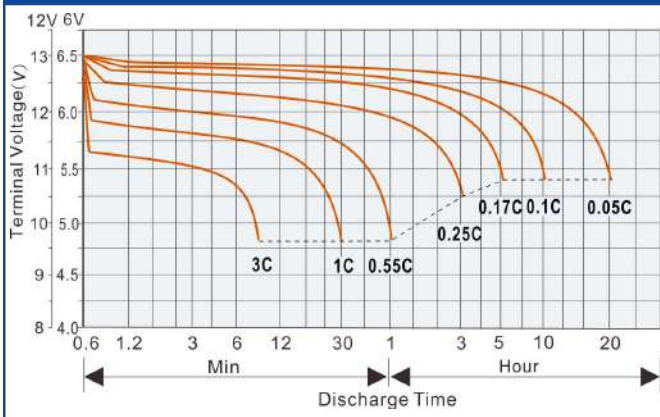


### ● Terminal Type

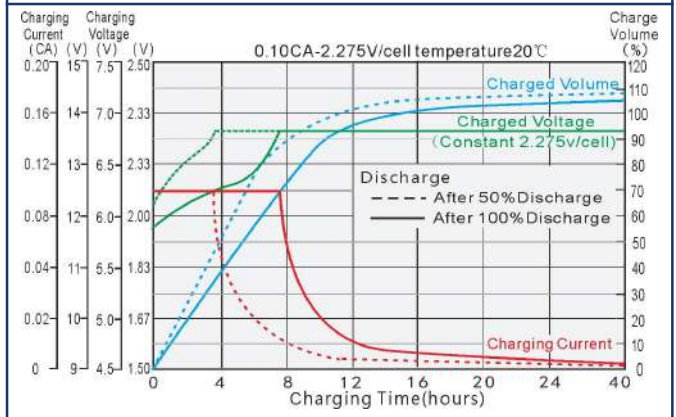
### ● Constant Current(Amp) and Constant Power(Watt) Discharge Table at 20°C (68°F)

F.V/Time		15min	20min	30min	1h	1.5h	2h	3h	5h	8h	10h	20h
1.85V/cell	A	220	204	174.0	110	84.0	70.8	50.0	34.5	23.70	19.70	10.44
	W	409	382	330.0	209	163.9	135.8	97.3	67.4	46.60	38.90	20.60
1.80V/cell	A	241	222	189.0	116	87.0	72.1	51.2	35.4	24.35	20.00	10.60
	W	438	406	350.0	220	168.4	137.6	99.4	69.1	47.70	39.50	20.70
1.75V/cell	A	262	240	202.0	122	89.8	73.3	52.3	36.2	24.90	20.15	10.68
	W	466	430	369.0	230	171.8	139.5	101.3	70.8	48.70	39.70	20.90
1.70V/cell	A	282	257	214.0	127	92.4	74.5	53.2	36.9	25.30	20.32	10.76
	W	492	452	387.0	239	176.2	141.6	102.8	72.1	49.50	39.90	21.00
1.67V/cell	A	293	264	219.0	129	93.4	75.0	53.5	37.1	25.41	20.38	10.80
	W	505	463	394.0	243	177.1	141.7	102.8	72.2	49.70	39.80	21.10
1.60V/cell	A	310	275	228.0	132	95.0	76.0	54.0	37.5	25.60	20.50	10.87
	W	530	484	409.0	250	179.4	142.8	103.5	72.6	49.90	39.90	21.30

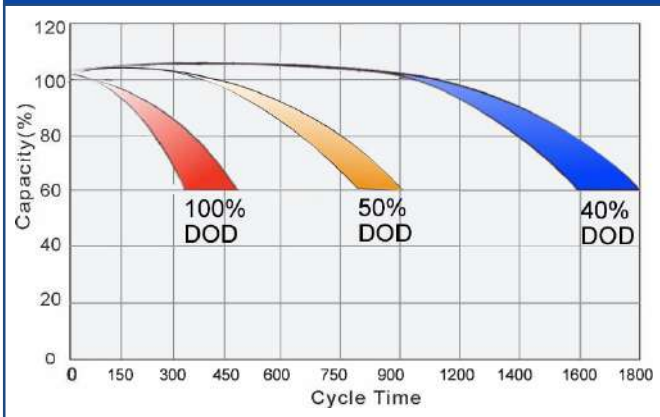
### Discharge characteristic curve (20°C/68°F)



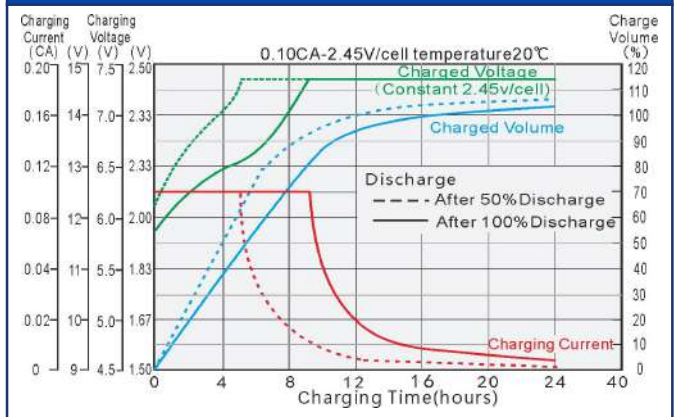
### Charging characteristic curve of floating charge(20°C/68°F)



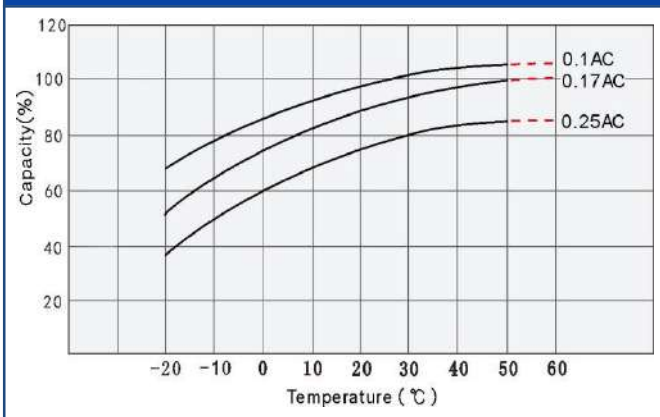
### Cycle service life in relation to depth of discharge



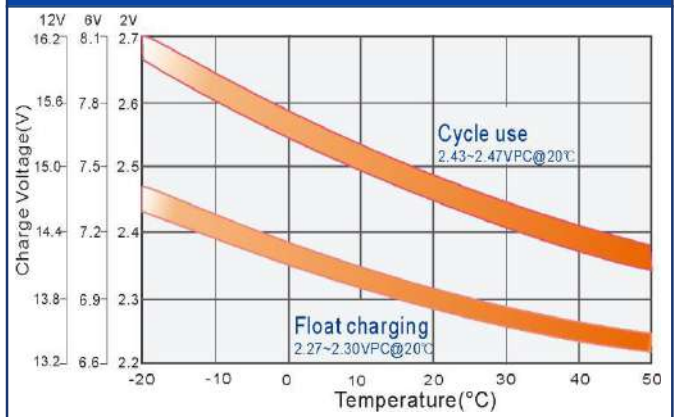
### Cyclic charging characteristic curve (20°C/68°F)



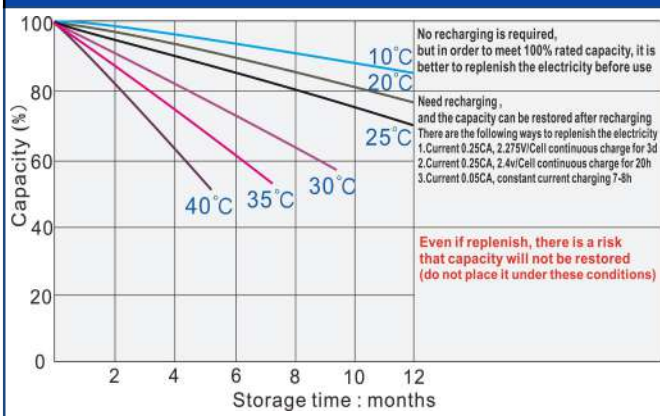
### Relationship between temperature and capacity



### Relationship between charging voltage and temperature



### Self discharge characteristics



### Temperature vs Float Life

