

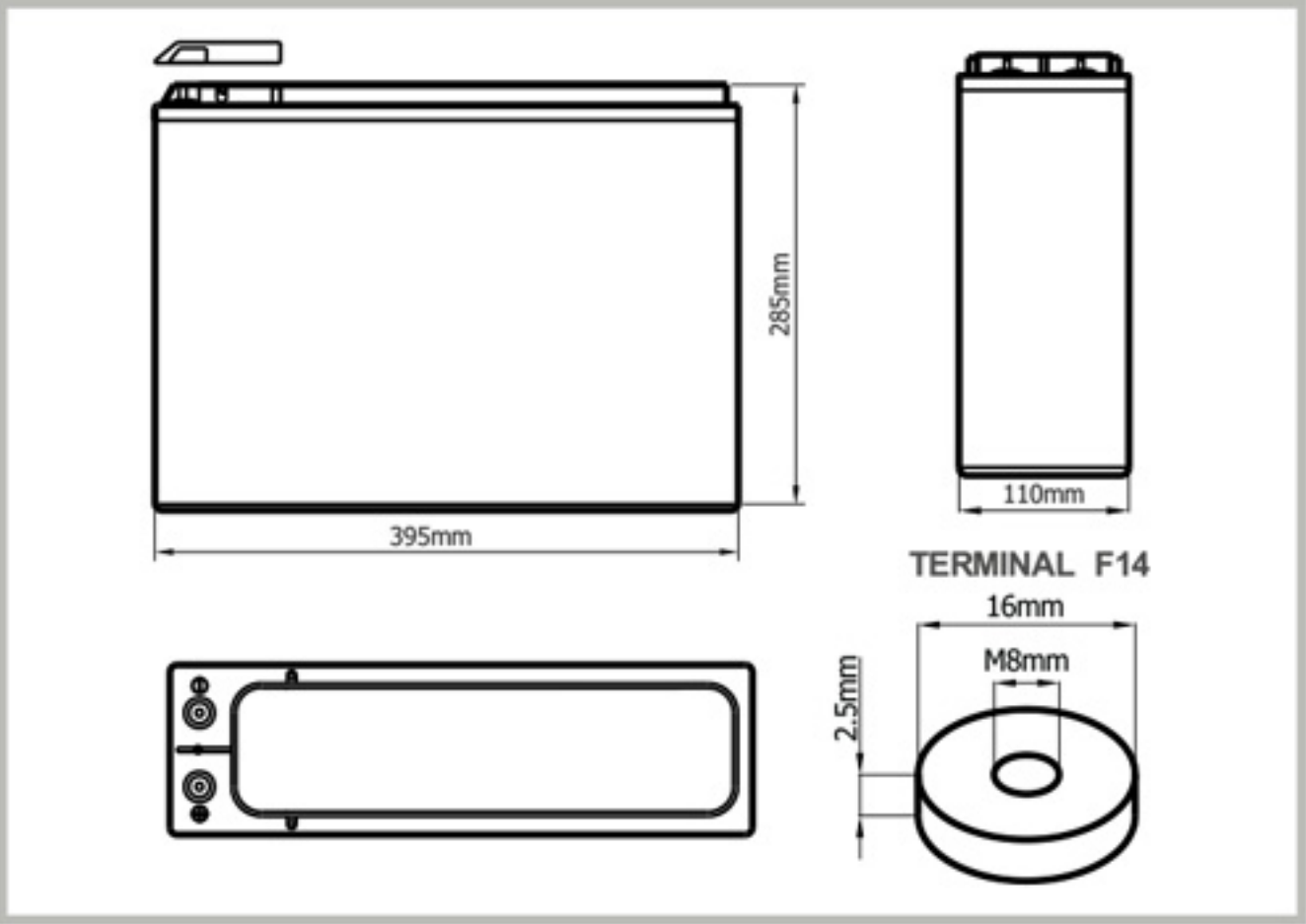
FT100

FT (Front Terminal) Battery Series Gel VRLA Battery. 12V - 100Ah

FRONT TERMINAL GEL VRLA BATTERY

By combining the newly developed nano gel electrolyte with up-to-sate AGM structures, Deutsche Power created the innovation Front terminal Gel range of batteries. The range features 15 years design life and front access connection for fast, easy installation and maintenance. This range battery is highly suited to telecom outdoor application, renewable energy systems and other harsh environment applications.

TECHNICAL SPECIFICATIONS



12V

100Ah

Front GEL

15 years design life



BATTERY DIMENSIONS

Nominal Voltage (V)	12 (6 cells per unit)
Designed Floating Life (20°C)	15 Years
Nominal Capacity (20°C)	100 Ah @ 10HR-rate (to 1.80Vpc)
Dimension (mm)	L395mm x W110mm x H285mm
Approx. Weight	32.0 kg (70.6 lbs)
Terminal Type	Female Copper Insert M8 (torque:10~12N.m)
Internal Resistance	Approx. 0.0045 Ohm (fully charged @ 20°C)
Max. Charge Current	25A
Max. Discharge Current (5S)	800 A
Short Circuit Current	2600 A
Self Discharge	Approx. 3% per month @ 20°C
Ambient Temperature	Discharge: -15~50°C Charge: -15~40°C Storage: -15~40°C
Float Charge Voltage (20~25°C)	13.6-13.8V (-3mV/ cell/ °C)
Equalize and cycle Use Charge Voltage (20~25°C)	14.4-14.8V (-5mV/ cell / °C)
Container Material	ABS (UL94-V0 optional)

ISO9001

ISO14001

CE

UL

Complied standards

- IEC 60896-21/22
- UL1989
- JIS C8704
- GB/T19639

BATTERY DISCHARGE TABLE

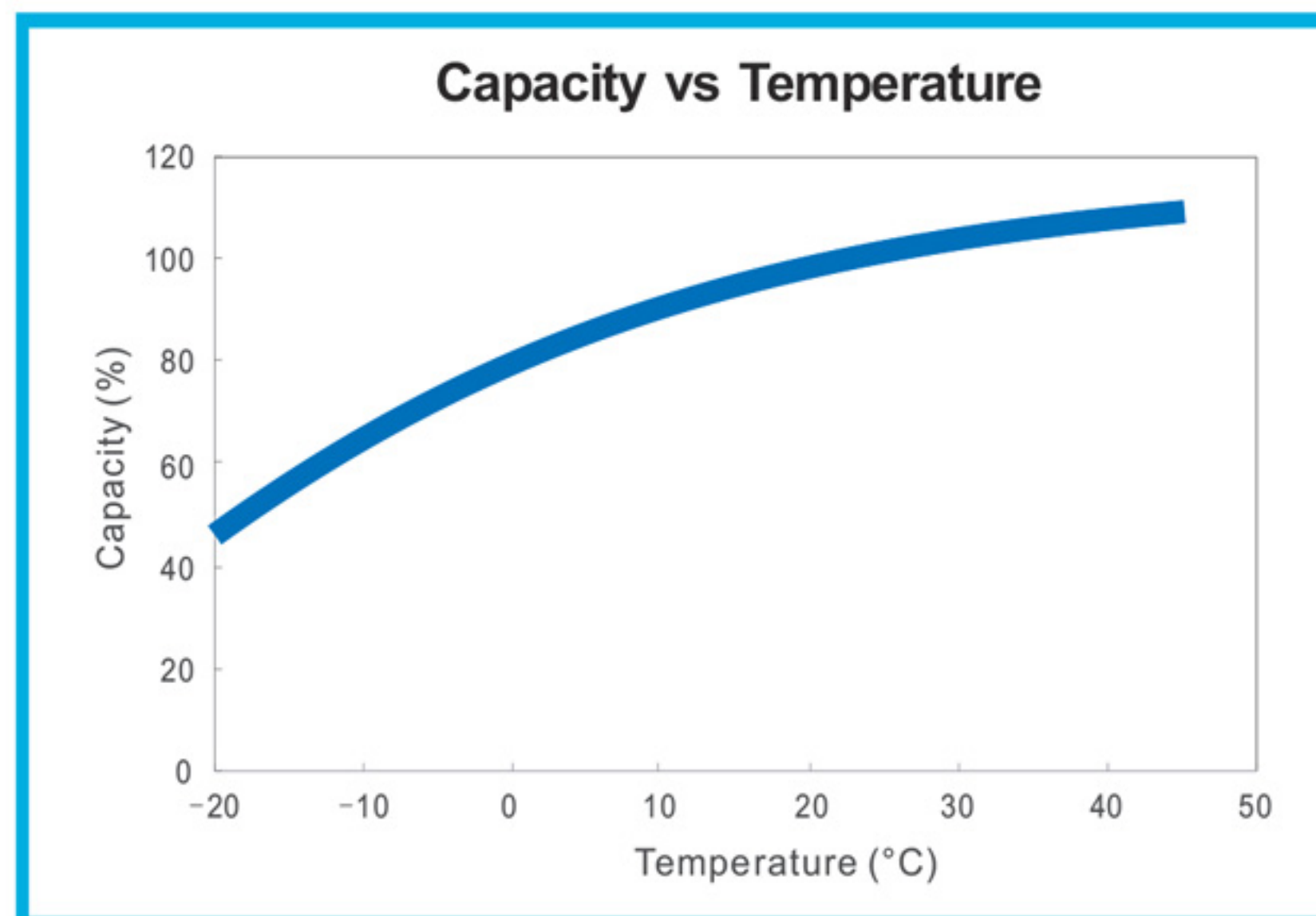
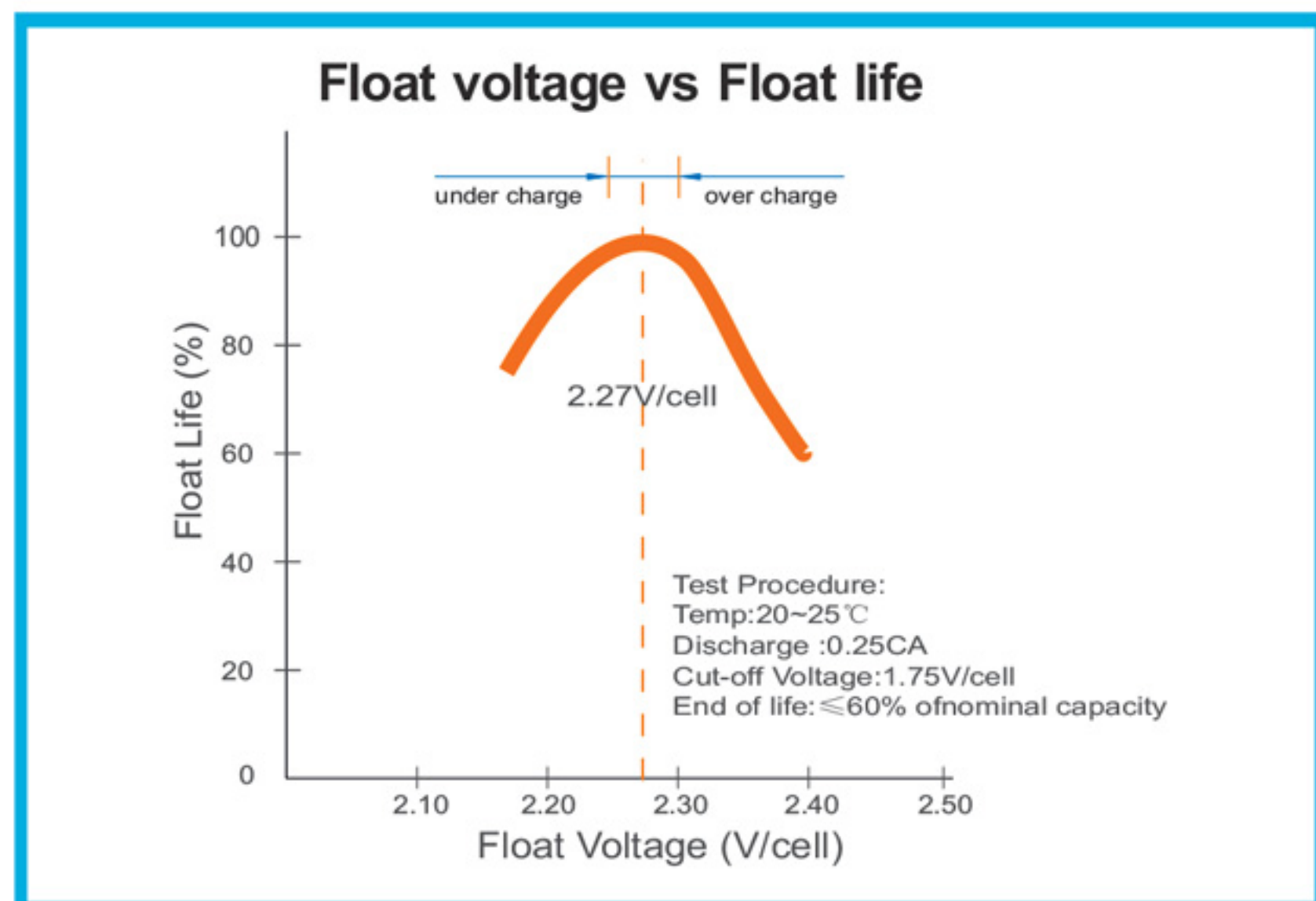
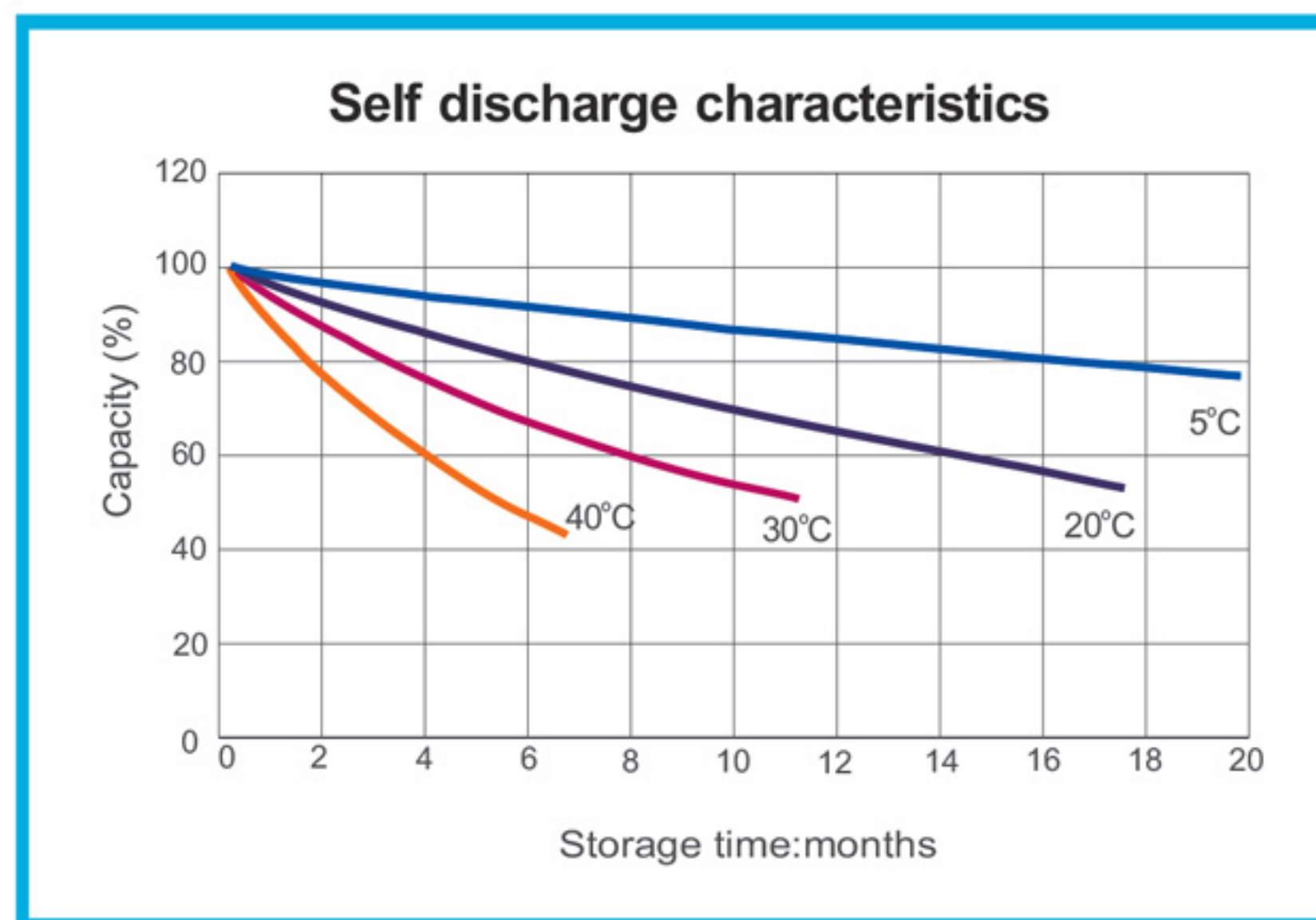
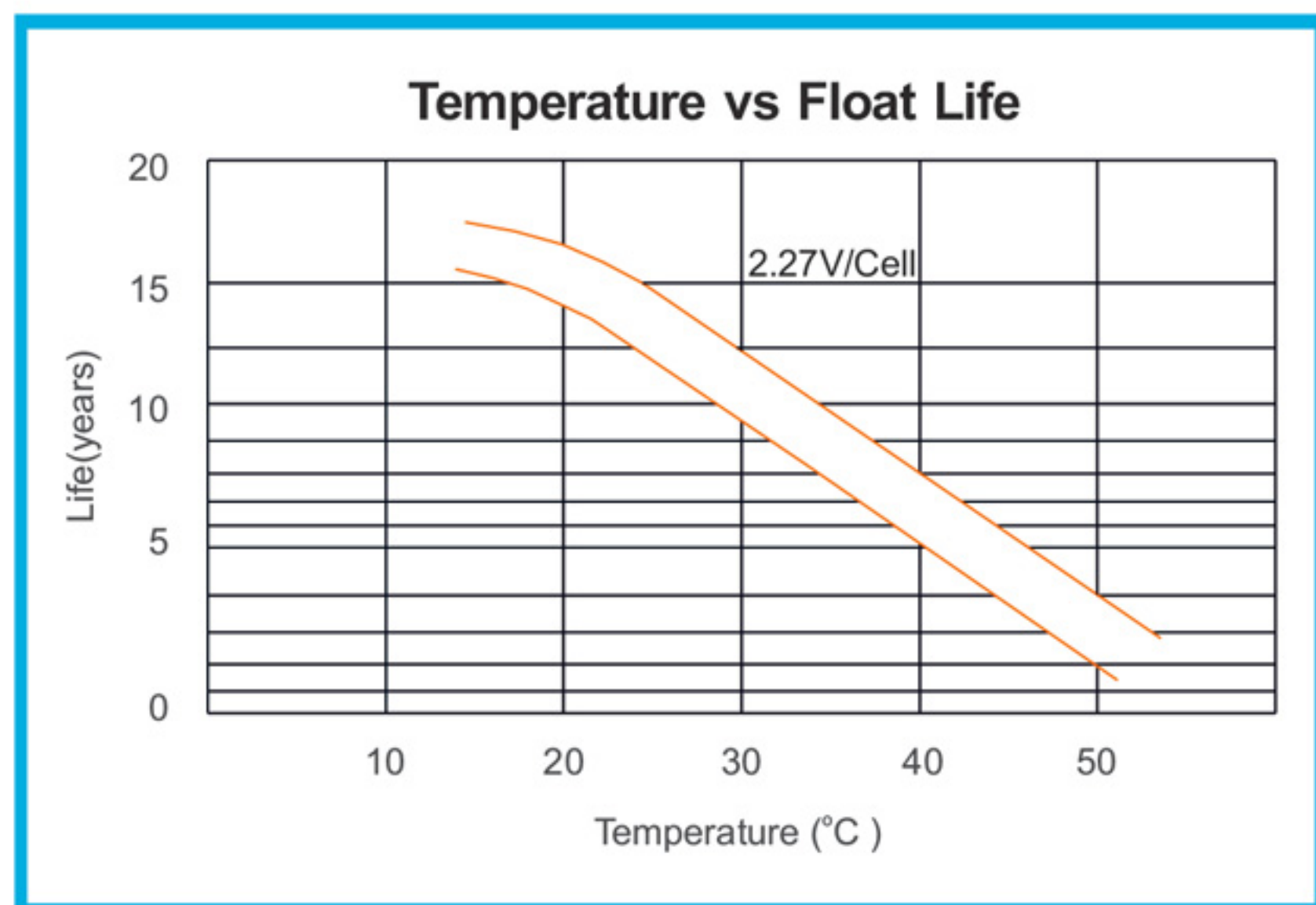
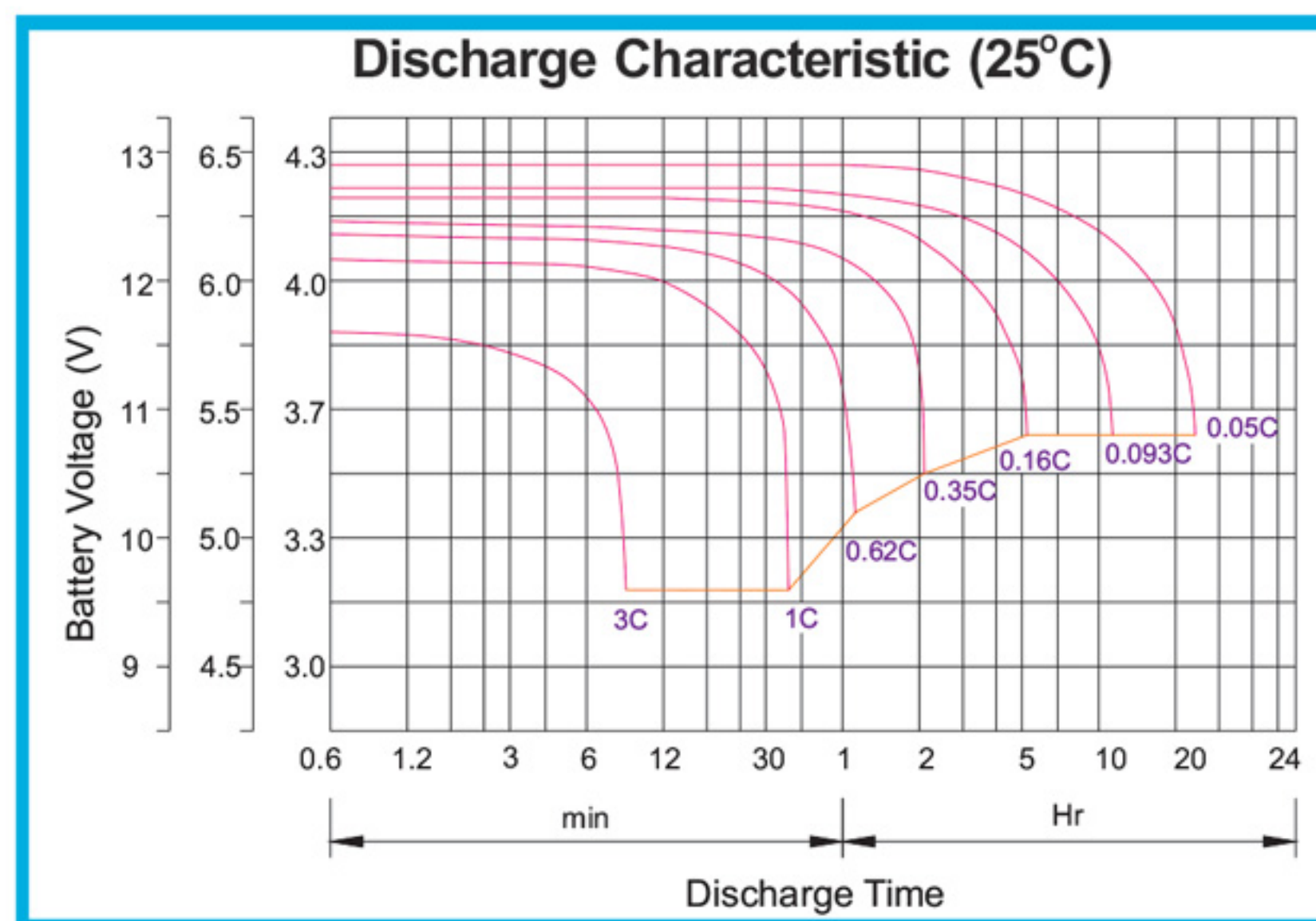
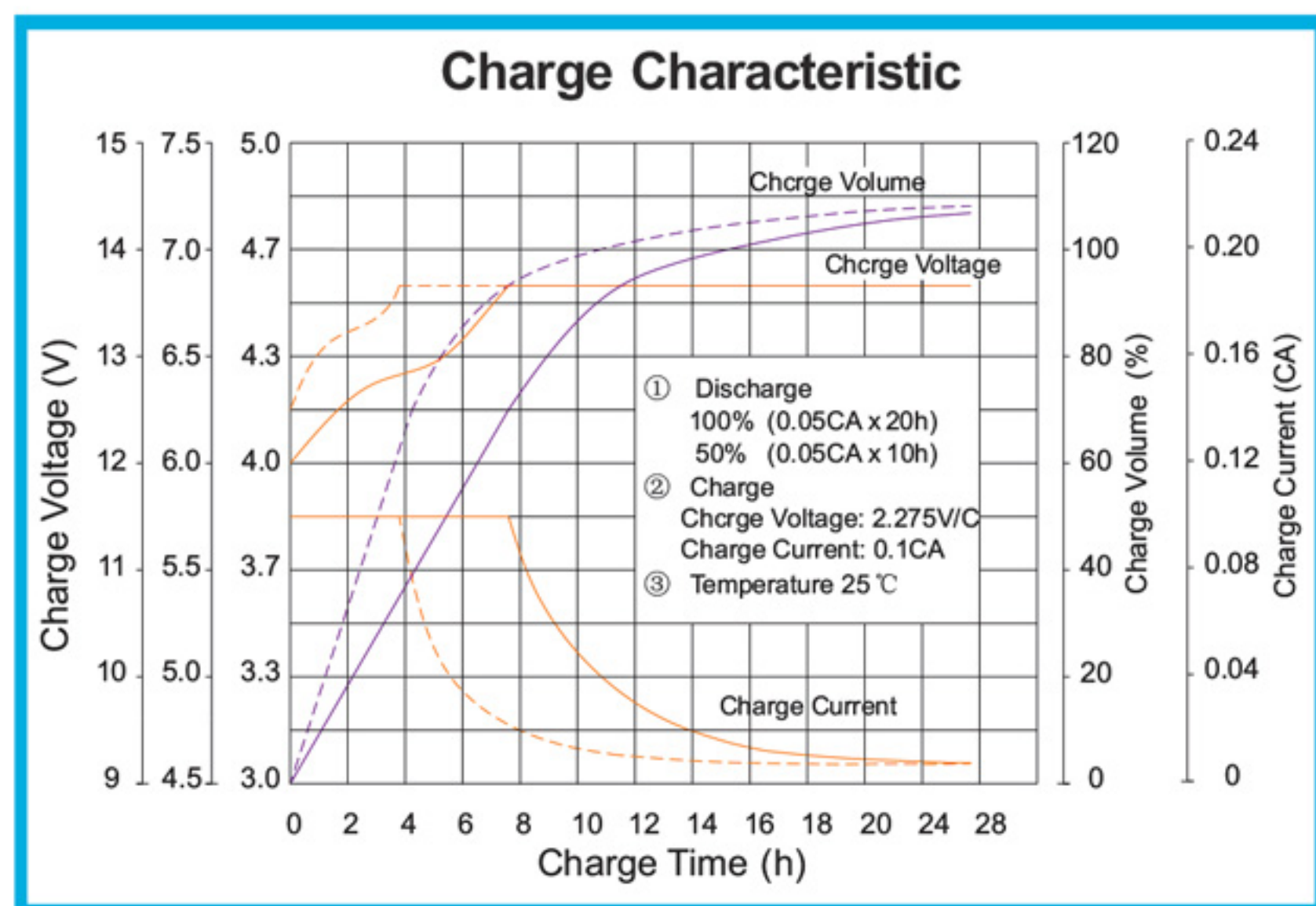
Constant Current Discharge Characteristics: Amps (25°C)												
F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	270	189	163	102	60.8	35.8	27.5	21.6	17.8	12.8	10.6	5.50
1.67V	241	174	153	97.8	59.2	35.2	27.1	21.2	17.5	12.6	10.5	5.45
1.70V	215	158	145	94.1	57.9	34.7	26.8	21.0	17.4	12.5	10.3	5.40
1.75V	187	147	134	90.8	56.7	34.1	26.4	20.7	17.2	12.3	10.2	5.33
1.80V	165	134	125	86.8	54.0	33.1	25.9	20.2	17.0	12.0	10.0	5.30
1.85V	142	121	114	81.9	52.4	31.8	24.7	19.6	16.2	11.6	9.65	5.00

Constant Power Discharge Characteristics: W/cell (25°C)												
F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	475	340	297	189	113	67.2	51.8	41.0	33.9	24.6	20.5	10.7
1.67V	430	317	281	182	111	66.5	51.6	40.4	33.5	24.4	20.3	10.7
1.70V	388	291	268	176	109	66.1	51.3	40.3	33.7	24.4	20.2	10.6
1.75V	342	273	252	172	108	65.5	50.9	40.2	33.5	24.1	20.1	10.6
1.80V	306	251	237	165	104	64.2	50.4	39.6	33.4	23.8	19.9	10.6
1.85V	267	229	218	158	102	62.2	48.4	38.7	32.1	23.0	19.3	10.1

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FT (Front Terminal) Battery Series
Gel VRLA Battery. 12V - 100Ah

CHARACTERISTICS



Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.80V	1.75V	1.70V	1.60V
Discharge Current I /A	$I < 0.2C$	$0.2C \leq I < 0.6C$	$0.6C \leq I < 1.0C$	$I \geq 1.0C$

Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method:

Constant Voltage	0.2Cx2h+2.4~2.45V/Cellx24h, Max. Current 0.25CA
Constant Current	0.2Cx2h+0.1CAx12h
Fast	0.2Cx2h+0.3CAx4.0h

Maintenance & Cautions

Cycle service

- ※ Avoid battery over discharge, especially battery series connection use.
- ※ Charged with recommend voltage, ensure battery can be full recharged.
- In general, recharge capacity should be 1.1-1.15 times discharge capacity.
- ※ Effect of temperature on cycle charge voltage: -5mV/ °C/Cell.
- ※ There are a number of factors that will affect the length of cyclic service.
- The most significant are depth of discharge, ambient temperature, discharge rate, and the battery recharge mode.
- Generally speaking, the most important factors is depth of discharge.