

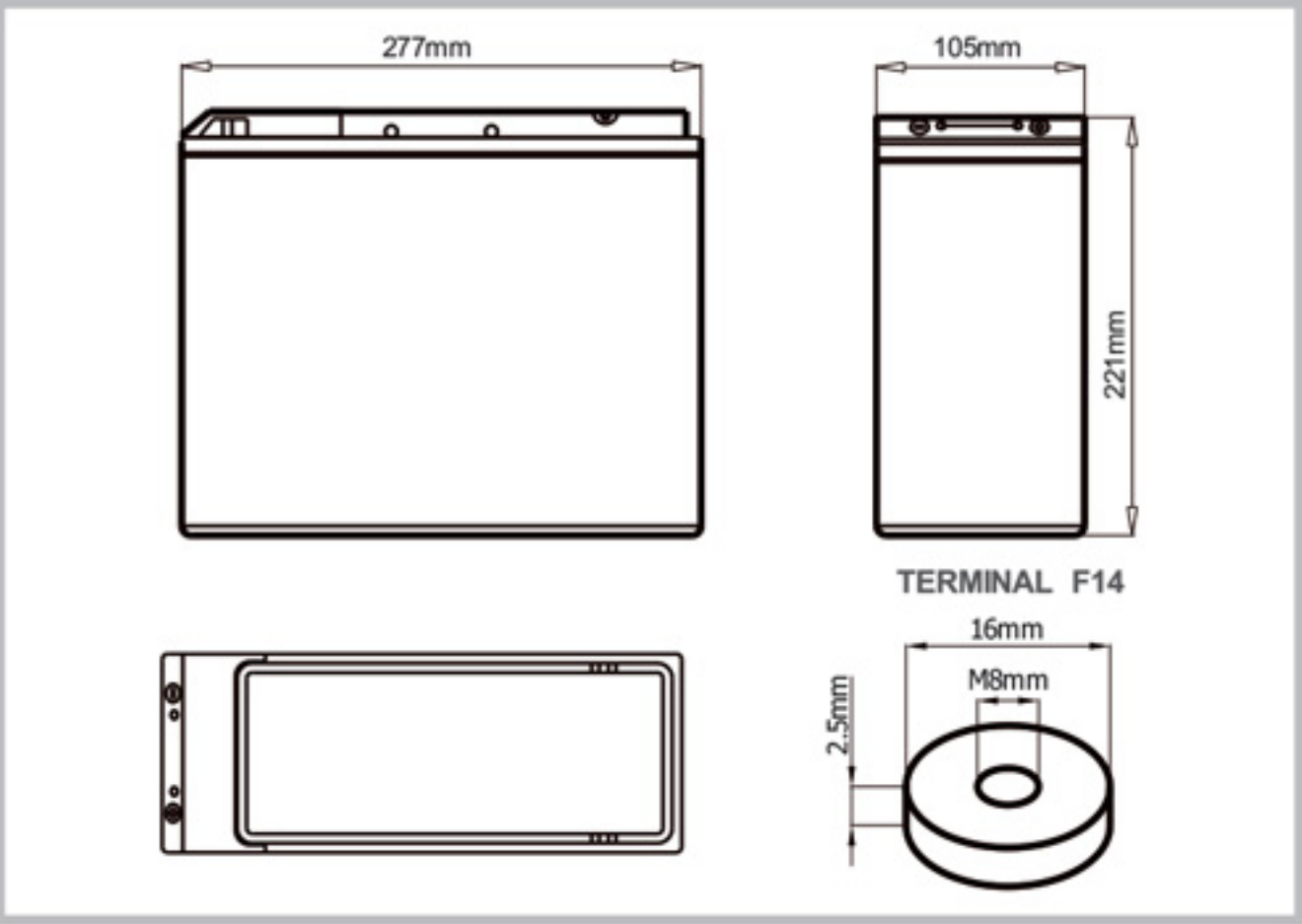
FT55

FT (Front Terminal) Battery Series Gel VRLA Battery. 12V - 55Ah

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

55Ah

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)	55 Ah @ 10HR-rate (to 1.80Vpc)
Dimension (mm)	L277mm x W106mm x H221mm
Approx. Weight	17.5 kg (38.6 lbs)
Terminal Type	Female Copper Insert M6 (torque:6~8N.m)
Internal Resistance	Approx. 0.007 Ohm (fully charged @ 20°C)
Max. Charge Current	14A
Max. Discharge Current (5S)	440 A
Short Circuit Current	1700 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

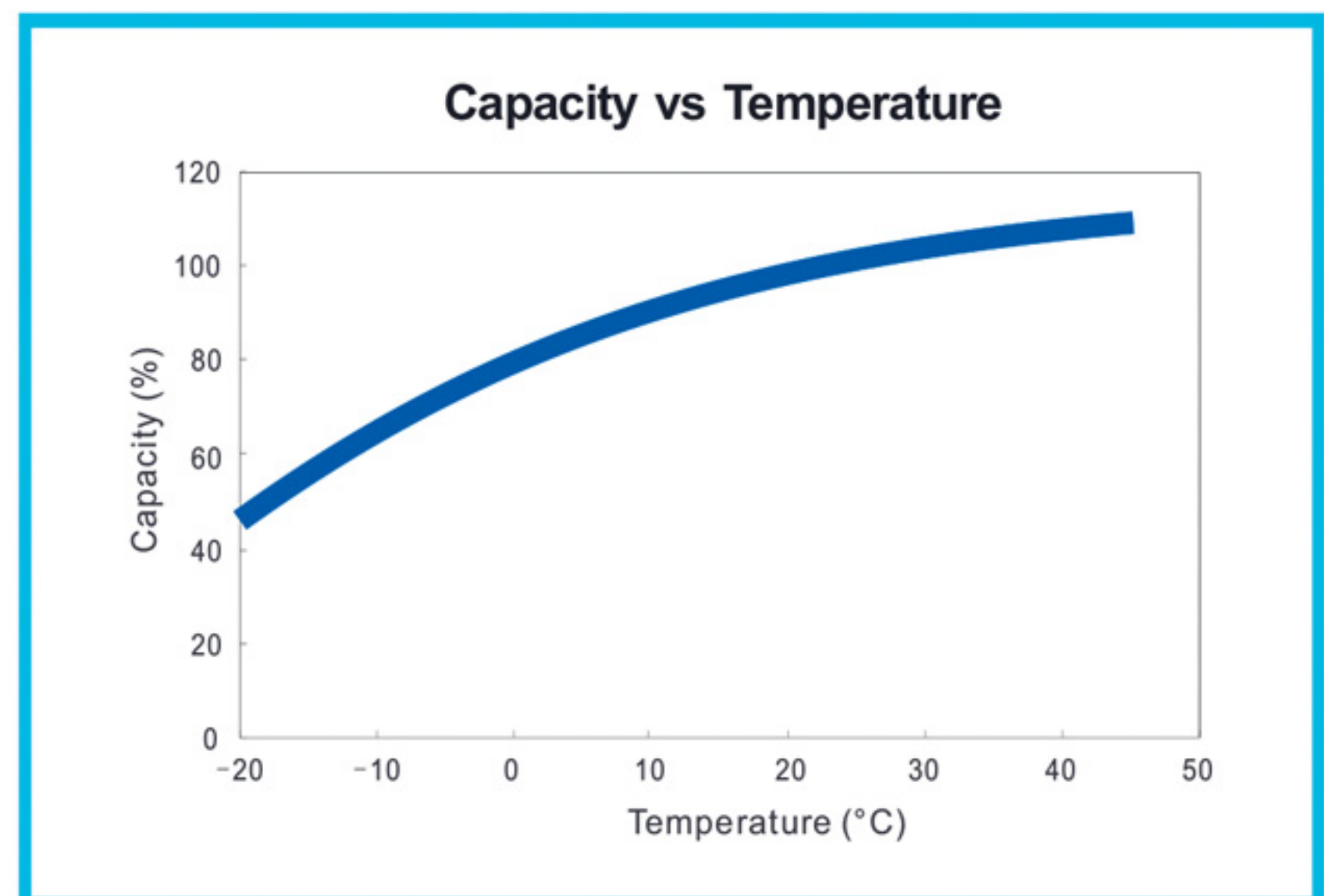
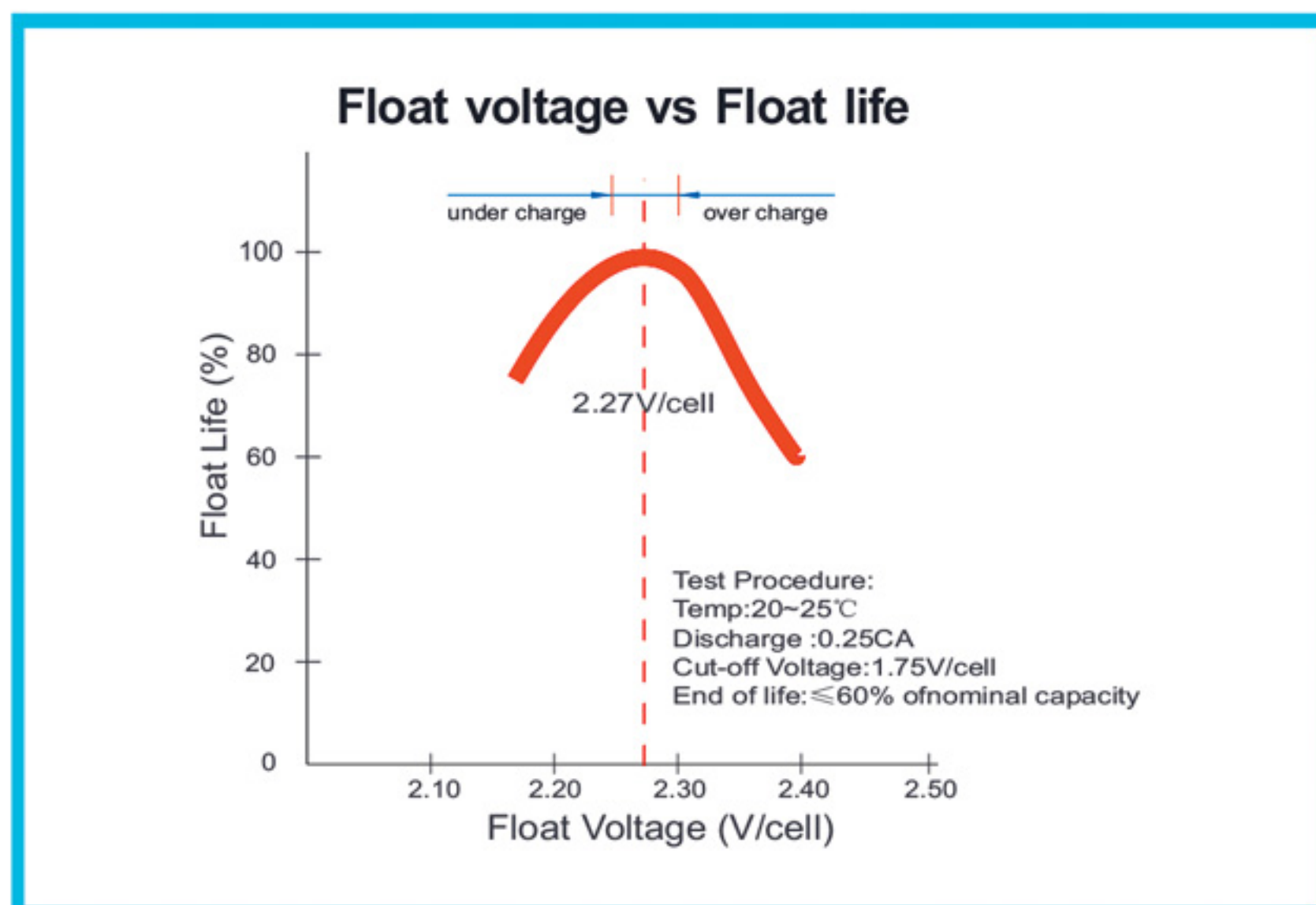
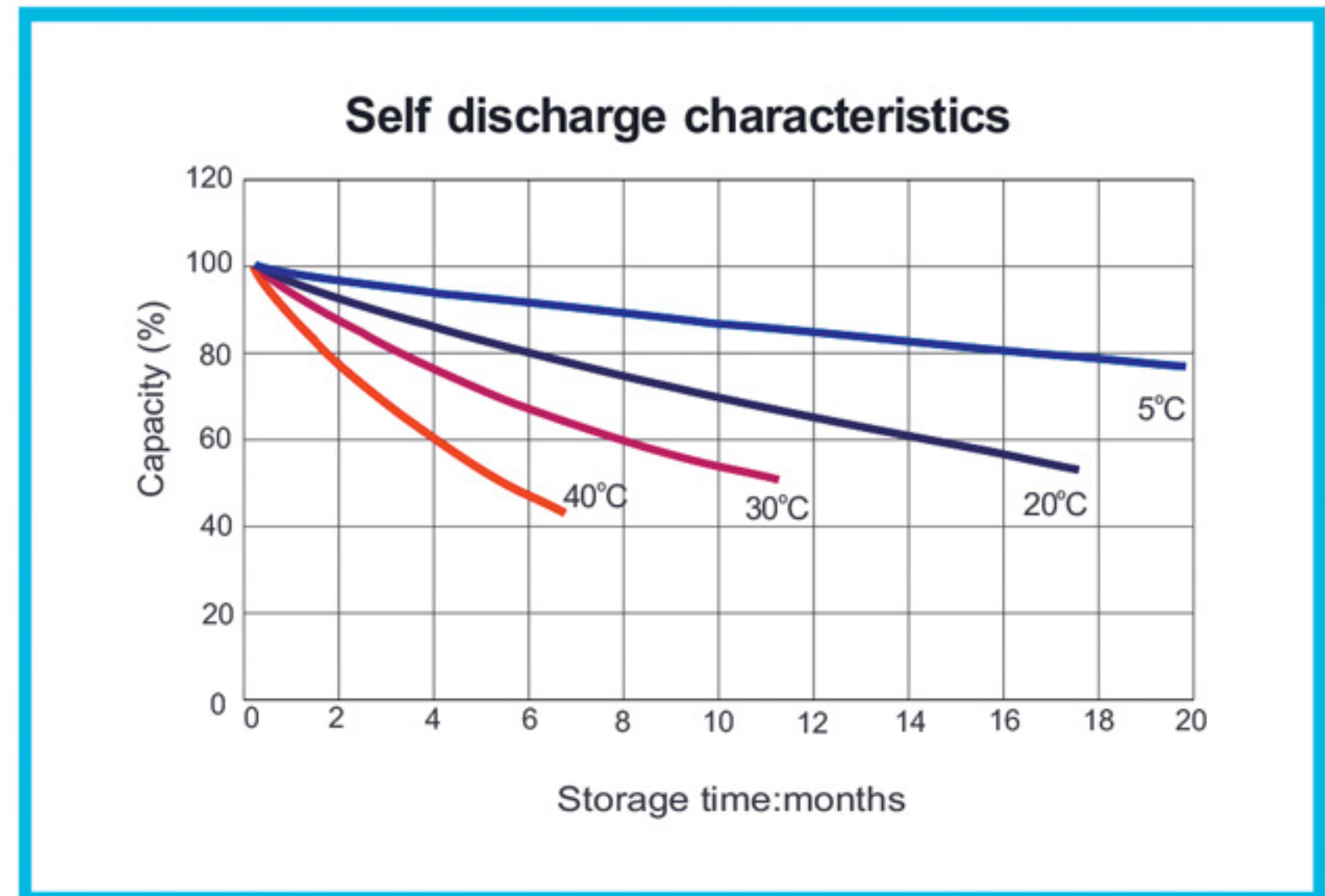
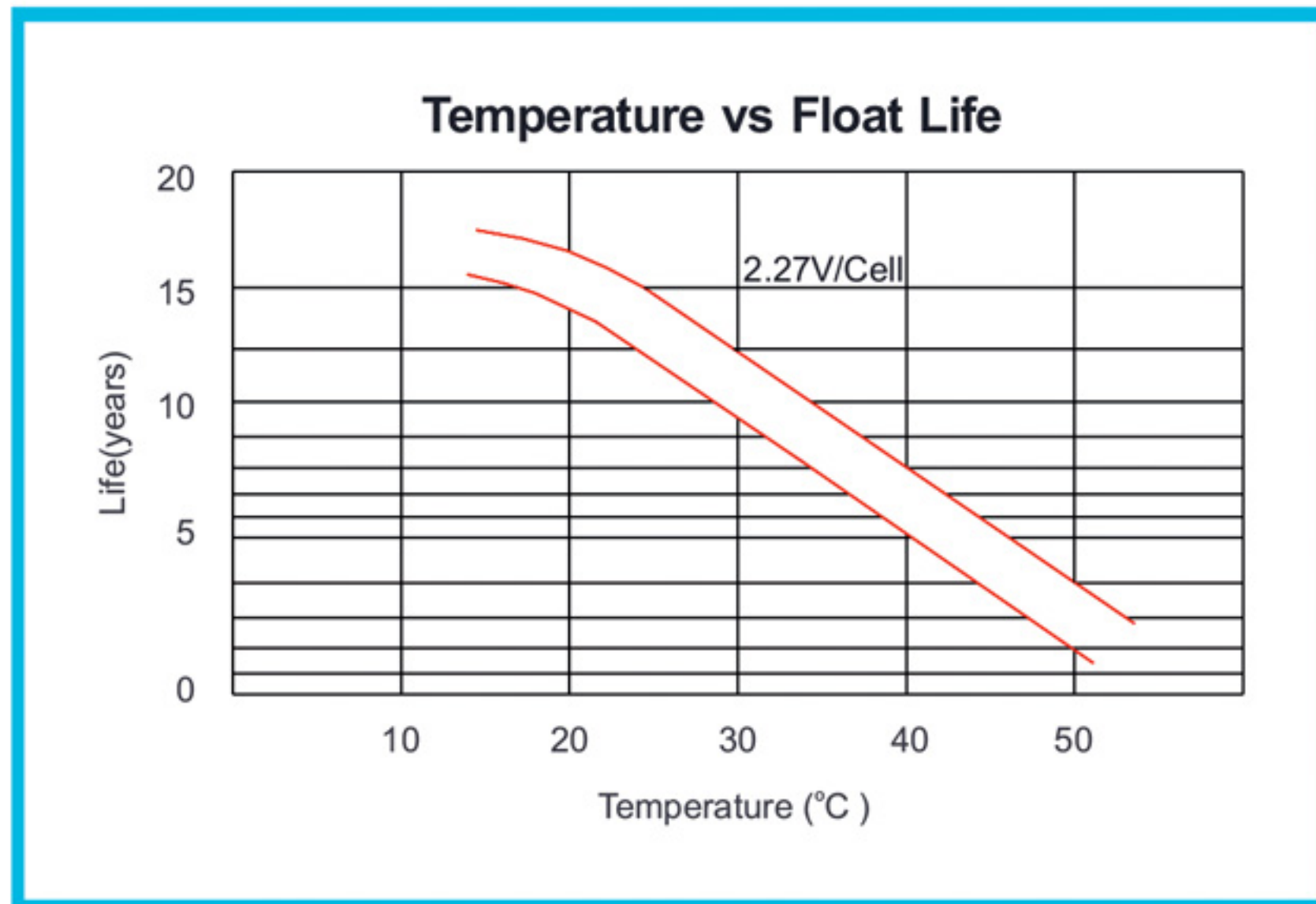
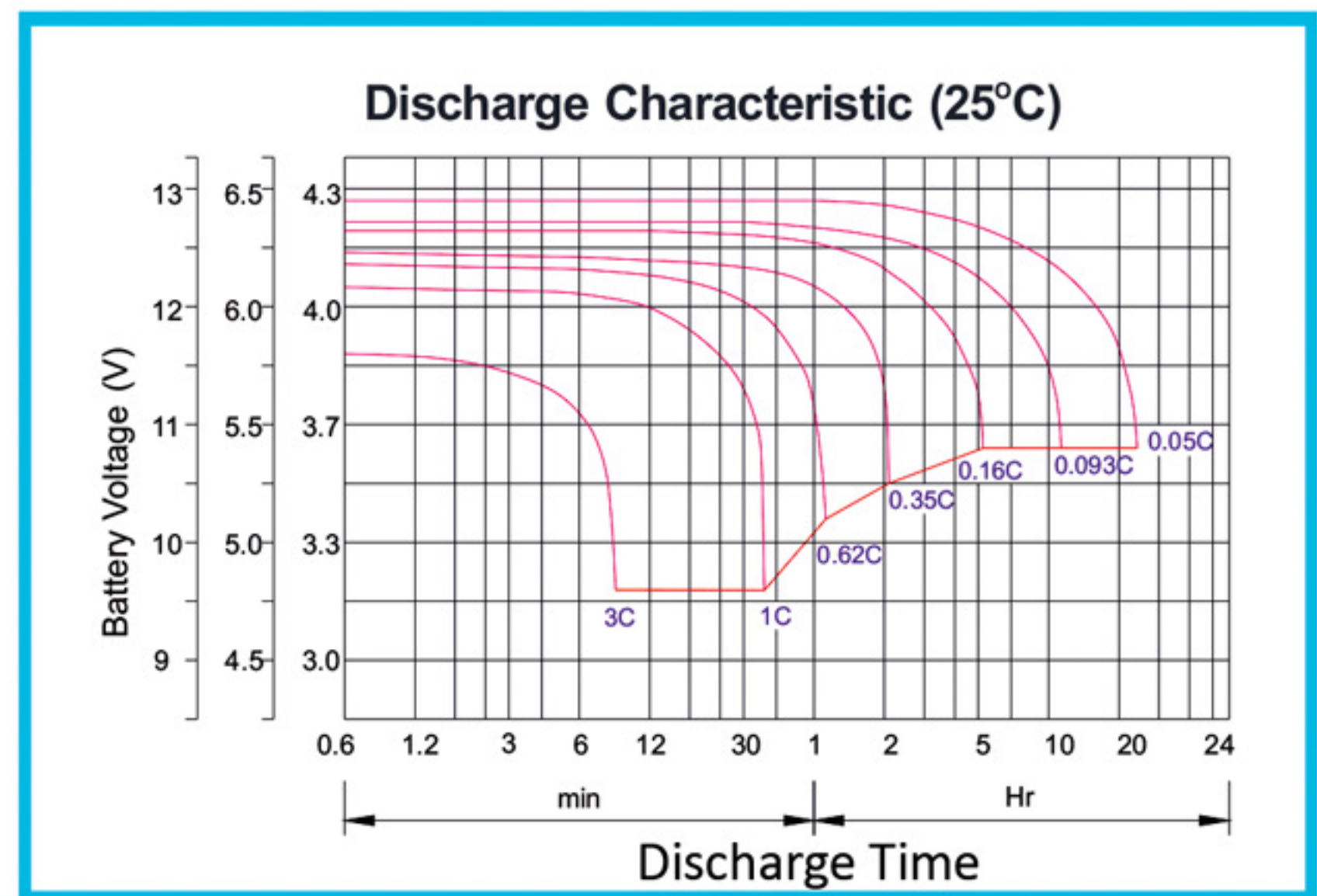
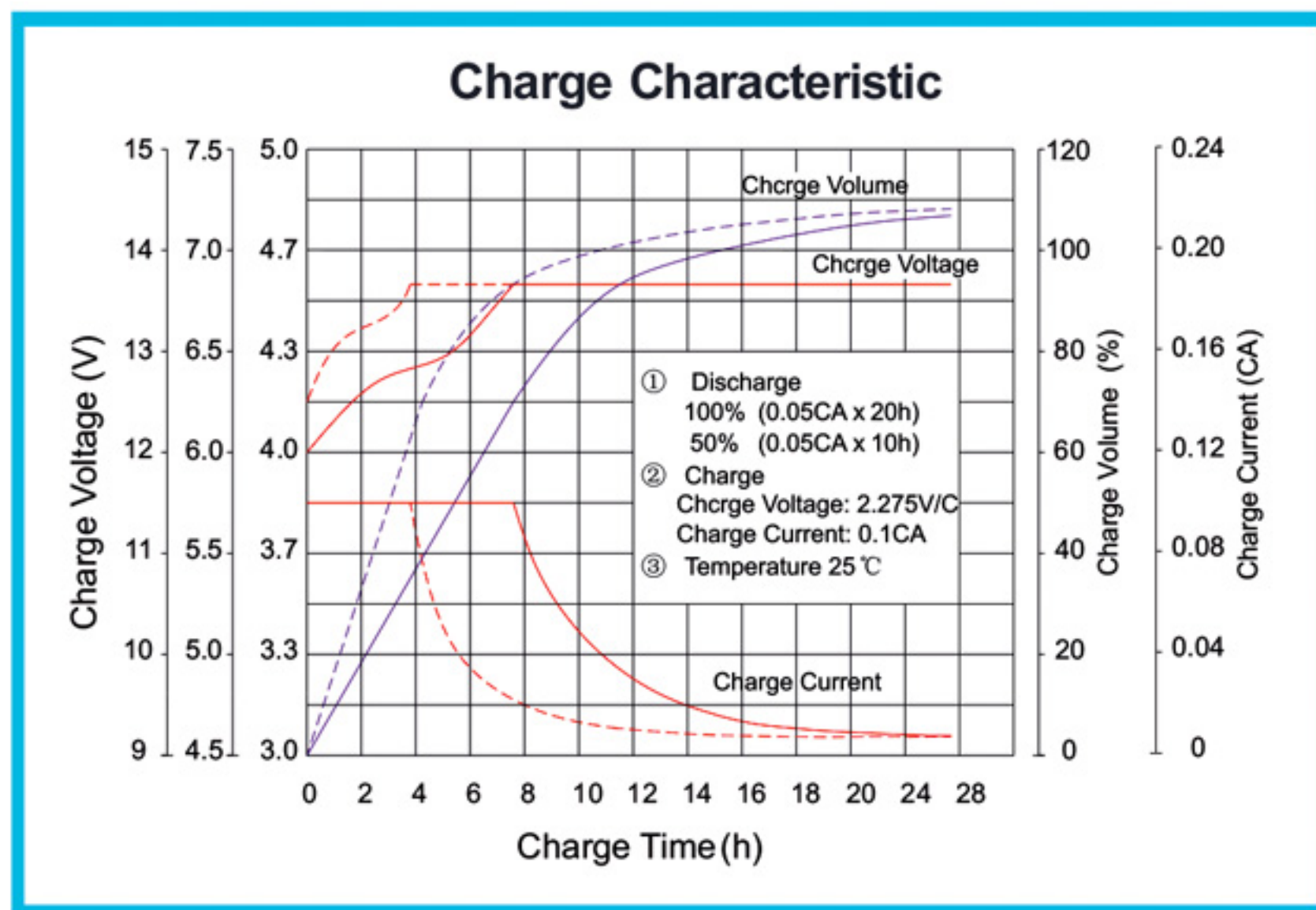
Constant Current Discharge Characteristics: Amps (25°C)												
F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	149	104	89.4	56.3	33.4	19.7	15.1	11.9	9.79	7.03	5.83	3.03
1.67V	133	95.9	84.2	53.8	32.6	19.4	14.9	11.6	9.63	6.93	5.76	3.00
1.70V	118	87.2	79.6	51.8	31.8	19.1	14.7	11.5	9.59	6.89	5.69	2.97
1.75V	103	81.0	73.9	50.0	31.2	18.8	14.5	11.4	9.46	6.74	5.61	2.93
1.80V	90.9	73.6	68.9	47.8	29.7	18.2	14.2	11.1	9.35	6.60	5.50	2.92
1.85V	77.8	66.3	62.8	45.1	28.8	17.5	13.6	10.8	8.91	6.36	5.31	2.75

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	262	187	163	104	62.3	37.0	28.5	22.5	18.6	13.5	11.3	5.87
1.67V	236	174	155	100	61.1	36.6	28.4	22.2	18.4	13.4	11.2	5.86
1.70V	214	160	148	96.9	60.1	36.4	28.2	22.2	18.5	13.4	11.1	5.85
1.75V	188	150	139	94.4	59.3	36.0	28.0	22.1	18.4	13.2	11.1	5.81
1.80V	168	138	130	91.0	57.0	35.3	27.7	21.8	18.4	13.1	10.9	5.82
1.85V	147	126	120	86.8	55.9	34.2	26.6	21.3	17.6	12.7	10.6	5.53

FT55

FT (Front Terminal) Battery Series
Gel VRLA Battery. 12V - 55Ah

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	$0.2C \times 2h + 2.4 \sim 2.45V/\text{Cell} \times 24h$, Max. Current 0.25CA
Constant Current	$0.2C \times 2h + 0.1CA \times 12h$
Fast	$0.2C \times 2h + 0.3CA \times 4.0h$

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: $-5mV/^\circ C/\text{Cell}$.
- ※ 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.