POWERSEL
ENERGY SOLUTIONS

FT12-125 (12V125Ah)

FT12-125 is a front terminal type battery specially designed for Telecom use with 10+ years design life. The adoption of centralized venting system makes sure the battery can be installed in any location, and guarantees high security and reliability.

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	125Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx.36.0Kg
Max. Discharge Current	1250 A (5 sec)
Internal Resistance	Approx. 5 mΩ
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C±5°C
Float charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	37.5 A
Equalization and Cycle Service	14.6 to 14.8 VDC/unit Average at 25°C
Self Discharge	Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Terminal F9
Container Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.

MH28539

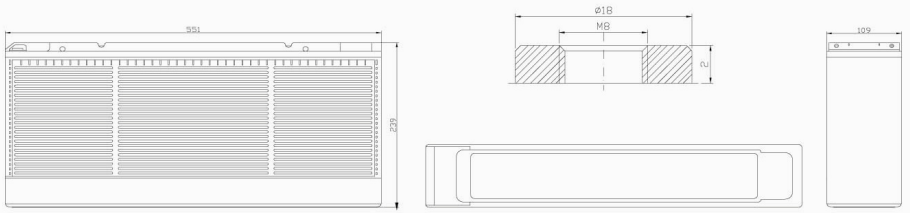
G4M20206-0910-E-16

ISO9001:2000 Certificate

Dimensions

Unit: mm Dimension: 551(L)×109(W)×239(H)

Terminal F9



Constant Current Discharge Characteristics : A(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	336.1	247.5	203.1	130.6	77.19	47.20	32.63	27.00	22.10	15.53	13.13	6.943
10.0V	326.4	235.5	198.9	128.4	76.83	46.85	32.50	26.88	21.97	15.40	13.00	6.817
10.2V	316.7	227.2	195.8	126.0	76.12	46.49	32.25	26.75	21.84	15.27	12.88	6.691
10.5V	284.4	209.6	186.4	125.0	75.41	46.14	32.13	26.50	21.58	15.15	12.75	6.564
10.8V	256.7	191.1	171.8	122.9	73.63	45.31	31.25	25.88	21.19	14.90	12.62	6.438
11.1V	219.2	170.8	154.1	115.1	69.94	43.30	29.88	24.63	20.28	14.26	12.25	6.059

Constant Power Discharge Characteristics : W(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.6V	3546	2636	2234	1479	891.9	556.4	388.2	321.8	263.7	185.4	156.9	83.25
10.0V	3476	2555	2198	1461	889.8	553.4	388.4	321.4	263.0	184.5	155.9	81.80
10.2V	3436	2487	2173	1451	882.9	550.1	386.7	320.7	262.1	183.3	154.5	80.29
10.5V	3128	2316	2073	1441	875.0	546.1	385.2	317.7	259.0	181.8	153.0	78.77
10.8V	2849	2135	1916	1417	858.9	539.1	374.7	310.5	254.3	178.8	151.5	77.26
11.1V	2503	1930	1725	1335	822.1	519.1	358.5	295.5	243.4	171.2	146.9	72.71

All mentioned values are average values.

FT12-125

12V125Ah

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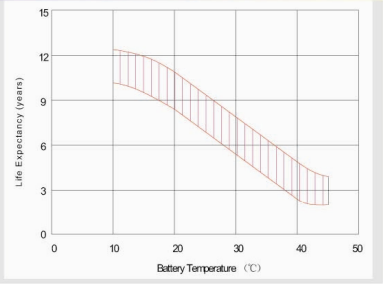
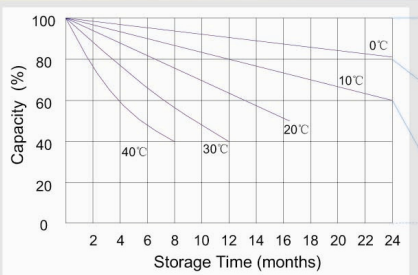
Effect of temperature on long term float life



Storage characteristic



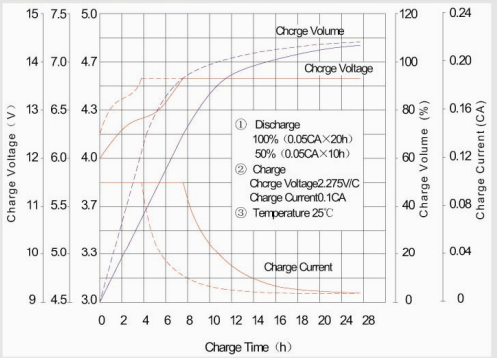
Supplementary charge required (Carry out supplementary charge before use if 100% capacity is requires)

Supplementary charge required before use. This supplementary charge will help to recover the capacity and should be made as early as possible.

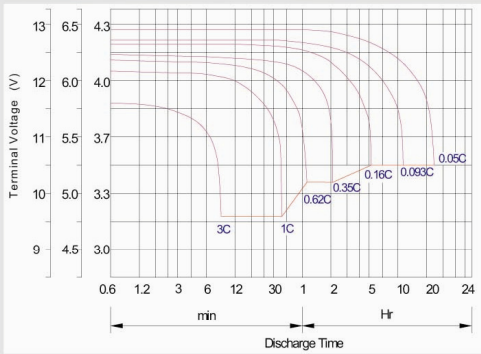
Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached

Supplementary charge and storage guidelines

Charge characteristic Curve for standby use



Discharge characteristic Curve



Capacity Factors With Different Temperature

Battery Type		-20℃	-10℃	0℃	5℃	10℃	20℃	25℃	30℃	40℃	45℃
GEL Battery	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤0.2C	0.2C< (A) <1.0C	(A) ≥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 0.3C
Constant Current	-0.2Cx2h+0.1Cx12h
Fast	-0.2Cx2h+0.3Cx4.0h

Maintenance & Cautions

Float Service:
※ Every month, recommend inspection every battery voltage.
※ Every three months, recommend equalization charge for one time.
Equalization charge method:
Discharge: 100% rate capacity discharge.
Charge: Max. current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h.
※ Effect of temperature on float charge voltage: -3mV/℃/Cell.
※ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.