

# FT12-185LD (12V185Ah)

FTLD12-185 is a front terminal type battery specially designed for Telecom use with 12+ 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

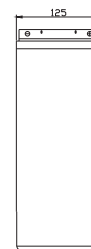
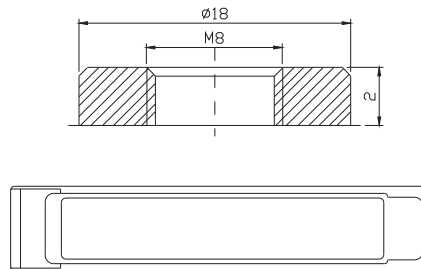
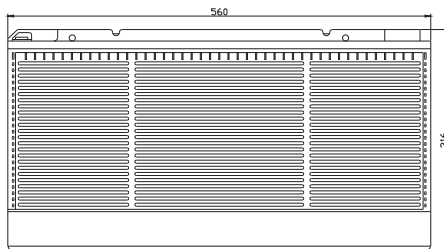
Cells Per Unit	6
Voltage Per Unit	12
Capacity	185Ah@10hr-rate to 1.75V per cell @25°C
Weight	Approx.60Kg(Tolerance±1.5%)
Max. Discharge Current	1850 A (5 sec)
Internal Resistance	Approx. 4 mΩ
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C±5°C
Float charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	54 A
Equalization and Cycle Service	14.6 to 14.8 VDC/unit Average at 25°C
Self Discharge	RITAR 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, UL94-V0 Optional.



## Dimensions

Unit: mm Dimension: 560(L)×125(W)×316(H)

Terminal F9



## Constant Current Discharge Characteristics : A(25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	303.0	185.9	115.5	71.29	48.45	39.07	32.43	21.36	19.59	10.37
10.0V	296.9	183.5	113.9	69.86	47.55	38.51	32.14	21.27	19.40	10.18
10.2V	290.6	180.7	112.9	69.12	47.13	38.13	31.93	21.08	19.20	9.98
10.5V	276.7	175.7	111.5	68.21	46.71	37.56	31.66	20.90	19.01	9.79
10.8V	255.0	169.9	109.9	67.65	46.17	36.28	31.51	20.81	18.84	9.69
11.1V	228.7	163.4	107.3	64.93	45.26	35.75	31.28	20.64	18.62	9.30

## Constant Power Discharge Characteristics : W(25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.6V	3292	2128	1338	835	570	468	389	256	235	125
10.0V	3245	2106	1326	825	562	461	385	255	233	123
10.2V	3209	2087	1318	819	559	457	383	253	231	120
10.5V	3065	2045	1310	809	555	451	380	251	229	118
10.8V	2860	1996	1293	803	549	435	378	250	226	117
11.1V	2605	1942	1273	773	539	429	376	248	224	113

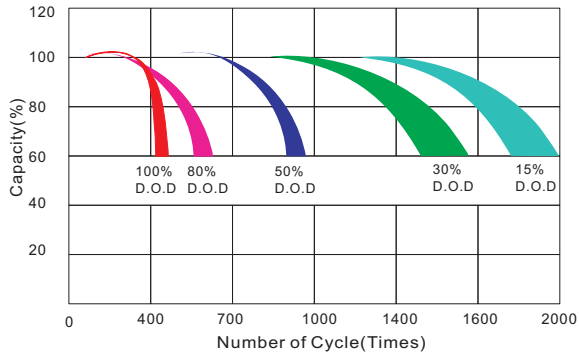
All mentioned values are average values(Tolerance±2%).

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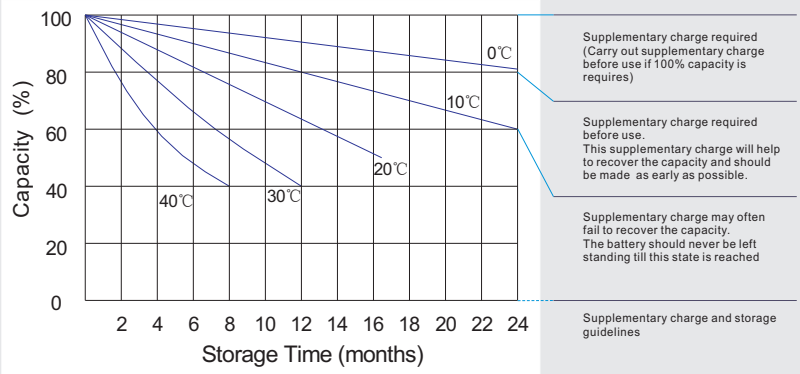
12V185Ah



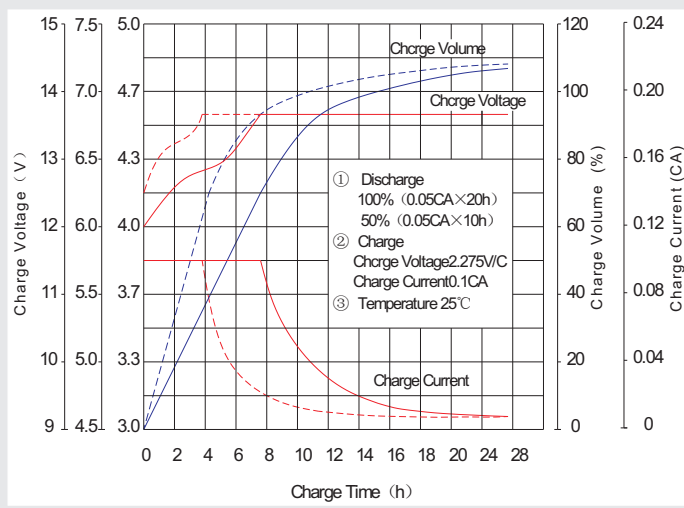
## Life characteristics of cyclic use



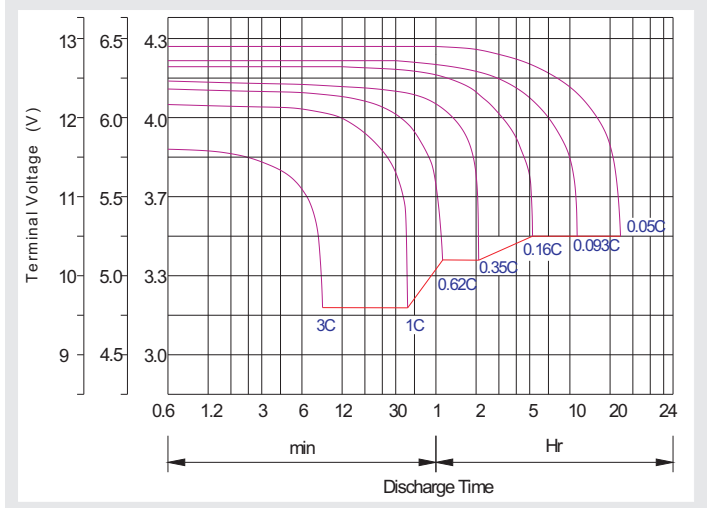
## Storage characteristic



## Charge characteristic curve for cyclic use



## Discharge characteristic curve



## Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
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+0.3Cx4h

Bolt	M5	M6	M8
Terminal	F3 F4 F13 F18 T25 T26	F8 F11 F12-1 F15	F5 F9 F10 F12 F14 F16
Torque	6~7N·m	8~10N·m	10~12N·m

## Maintenance & Cautions

<b>Cycle service</b>
※ 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: -4mV/°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 manner in which the battery is recharged.
Generally speaking, the most important factors is depth of discharge.