

# RA12-185FS (12V185Ah)

RA12-185FS 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	185Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx.60.0Kg
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	55.5 A
Equalization and Cycle Service	14.6 to 14.8 VDC/unit Average at 25°C
Self Discharge	
Terminal	Terminal F9
Container Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.



MH28539

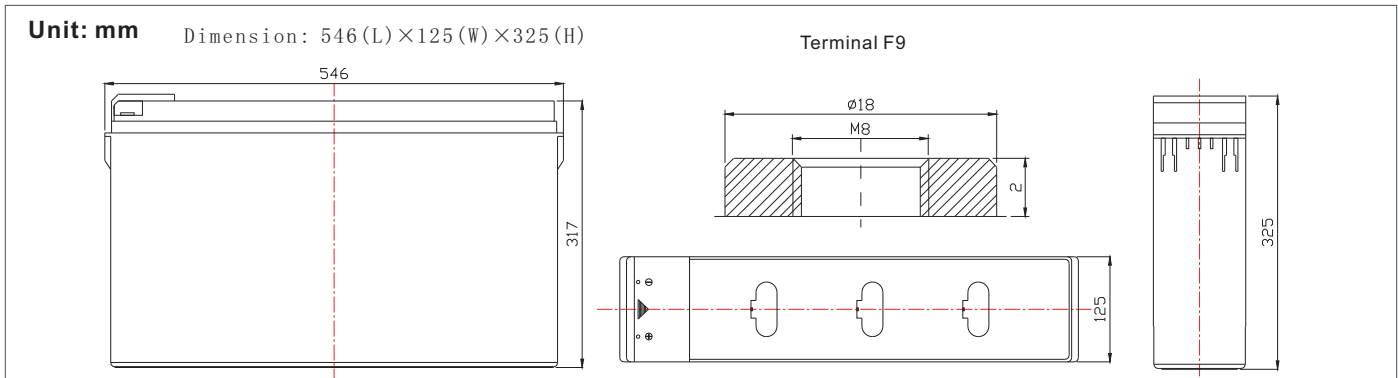


G4M20206-0910-E-16



ISO9001:2000 Certificate

## Dimensions



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

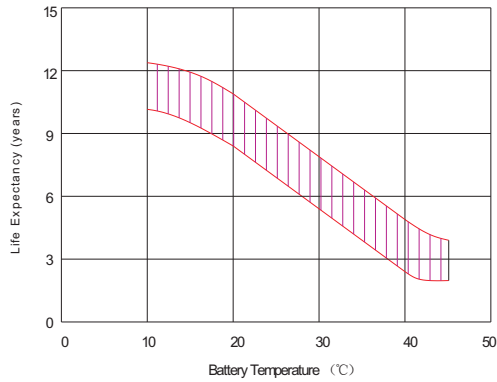
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	471.3	347.0	285.5	193.3	114.2	69.86	48.29	39.96	32.71	22.98	19.43	10.276
10.0V	457.7	330.1	279.7	190.0	113.7	69.33	48.10	39.78	32.52	22.79	19.24	10.089
10.2V	444.1	318.5	275.3	186.5	112.7	68.81	47.73	39.59	32.32	22.61	19.06	9.902
10.5V	398.8	293.9	262.1	185.1	111.6	68.28	47.55	39.22	31.94	22.42	18.87	9.715
10.8V	359.9	268.0	241.6	181.9	109.0	67.06	46.25	38.30	31.36	22.05	18.68	9.528
11.1V	307.3	239.5	216.7	170.3	103.5	64.08	44.22	36.45	30.01	21.11	18.12	8.968

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

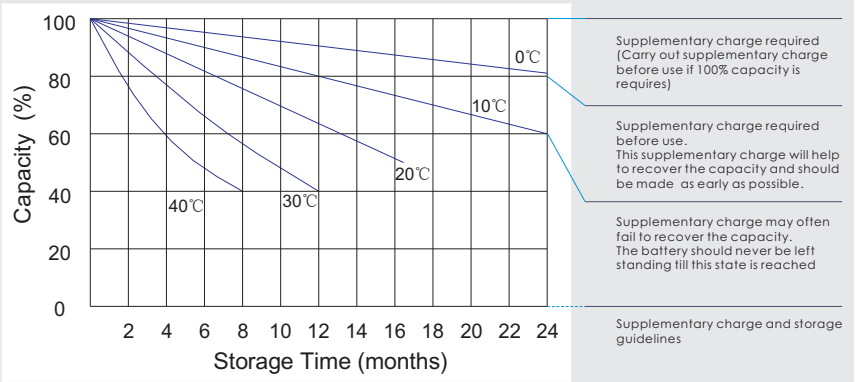
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	4972	3695	3141	2189	1320	823.4	574.6	476.3	390.2	274.4	232.2	123.2
10.0V	4874	3582	3090	2162	1317	819.0	574.8	475.7	389.2	273.1	230.7	121.1
10.2V	4818	3488	3055	2147	1307	814.1	572.3	474.7	387.9	271.3	228.7	118.8
10.5V	4386	3248	2914	2132	1295	808.2	570.1	470.2	383.3	269.0	226.4	116.6
10.8V	3995	2994	2694	2098	1271	797.9	554.5	459.5	376.3	264.6	224.2	114.3
11.1V	3509	2707	2425	1976	1217	768.2	530.6	437.3	360.2	253.3	217.5	107.6

All mentioned values are average values.

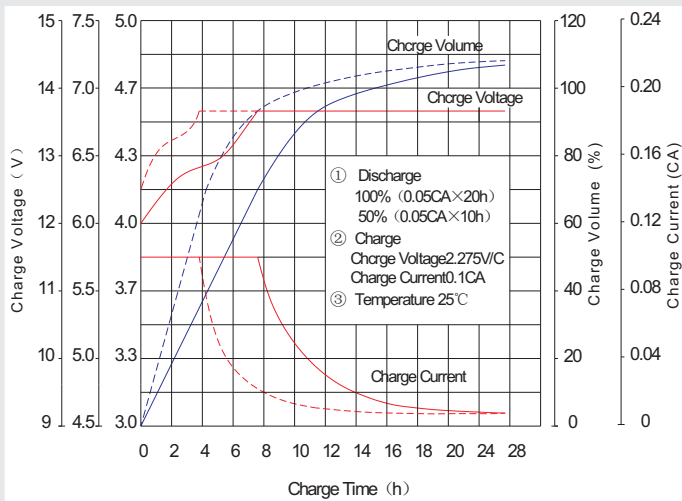
### Effect of temperature on long term float life



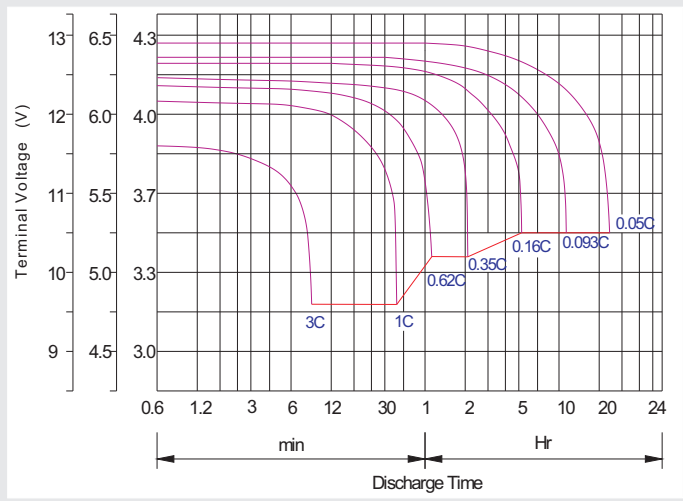
### Storage characteristic



### Charge characteristic Curve for standby 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 0.3CA
Constant Current	-0.2Cx2h+0.1CAx12h
Fast	-0.2Cx2h+0.3CAx4.0h

### 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/°C/Cell.

- ※ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.