

# HX12-180FT (12V180Ah)

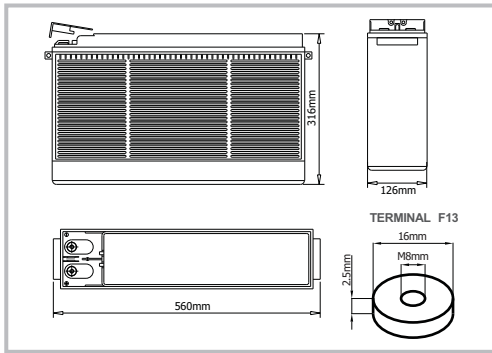


## ▲ FRONT TERMINAL VRLA BATTERY ▲

The Front Terminal Series is specially designed for telecommunication use with 15+ years design life in float service. By combining the newly developed paste formula with up-to-date AGM structures, this range features 15 years design life and Front Terminal connection for fast, easy installation and maintenance. This series is highly suited for telecom applications, UPS systems



## ▲ BATTERY DIMENSIONS ▲



12V

180Ah

Front  
AGM

15 years  
design life

## ▲ TECHNICAL SPECIFICATIONS ▲

Nominal Voltage (V)	12 (6 cells per unit)
Designed Floating Life (20°C)	15 Years
Nominal Capacity (20°C)	180 Ah @ 10HR-rate (to 1.80Vpc)
Dimension (mm)	L560mm x W126mm x H316mm
Approx. Weight	56.0 kg (123.5 lbs)
Terminal Type	Female Copper Insert M8 (torque:10~12N.m)
Internal Resistance	Approx. 0.0045Ohm (fully charged @ 20°C)
Max. Charge Current	54A
Max. Discharge Current (5S)	1800 A
Short Circuit Current	3000 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

**Complied standards**

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

## ▲ BATTERY DISCHARGE TABLE ▲

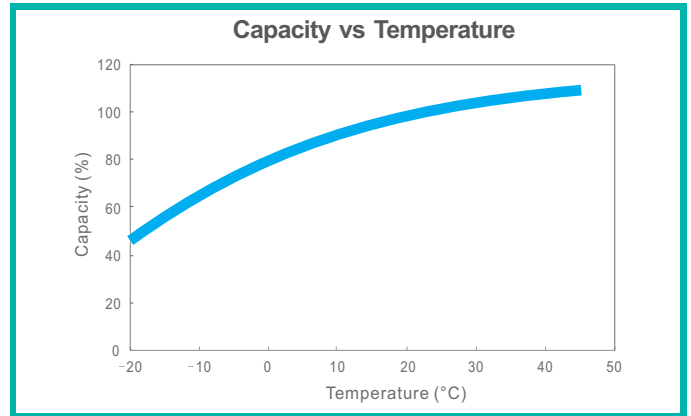
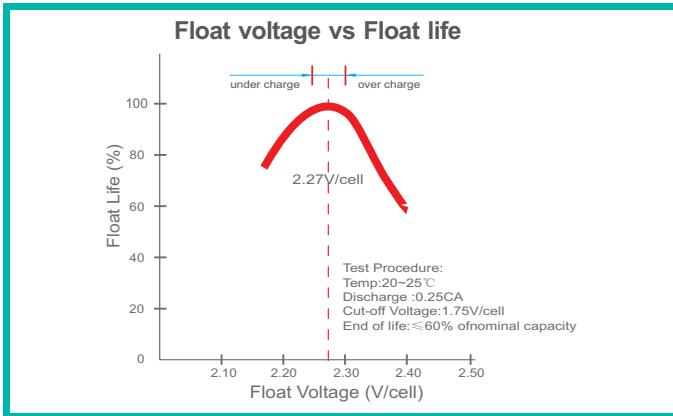
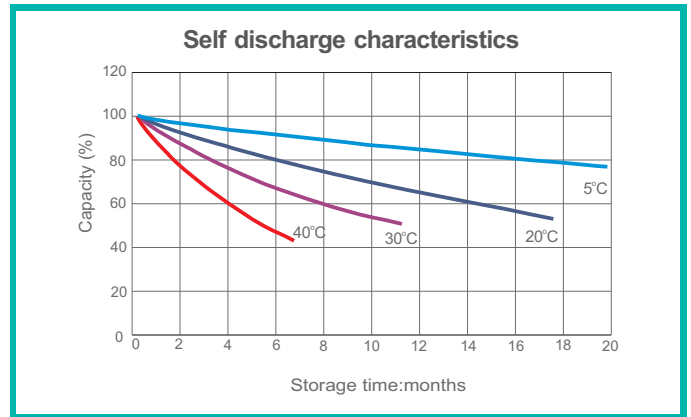
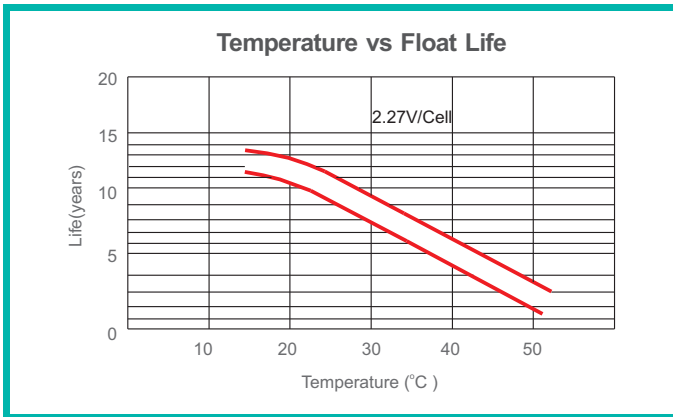
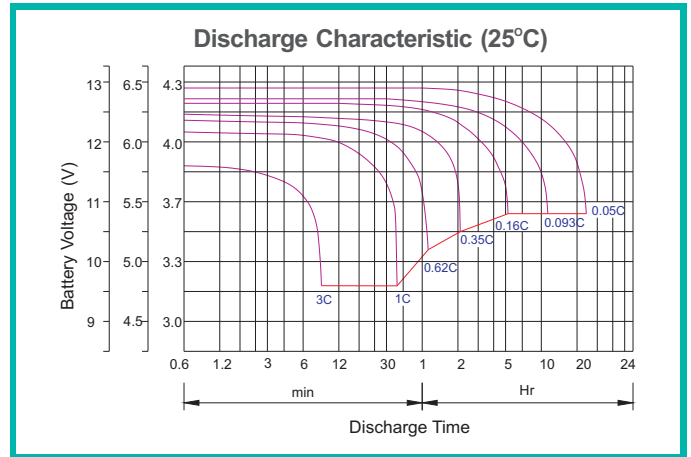
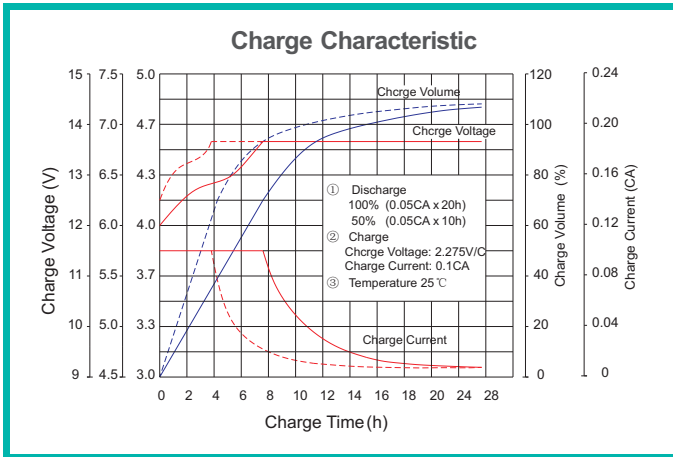
### Constant Current Discharge Characteristics: Amps (25°C)

F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	486	341	293	184	109	64.4	49.4	38.9	32.0	23.0	19.1	9.90
1.67V	434	314	276	176	107	63.3	48.8	38.1	31.5	22.7	18.8	9.81
1.70V	387	285	260	169	104	62.5	48.3	37.7	31.4	22.5	18.6	9.72
1.75V	336	265	242	164	102	61.4	47.5	37.3	31.0	22.1	18.4	9.59
1.80V	298	241	226	156	97.2	59.6	46.6	36.4	30.6	21.6	18.0	9.54
1.85V	255	217	206	147	94.4	57.3	44.4	35.3	29.2	20.8	17.4	9.00

### 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	856	612	534	340	204	121	93.3	73.8	61.0	44.2	36.9	19.2
1.67V	773	570	507	327	200	120	92.8	72.7	60.3	43.9	36.6	19.2
1.70V	699	523	483	317	197	119	92.3	72.5	60.6	43.9	36.4	19.2
1.75V	615	492	453	309	194	118	91.7	72.3	60.3	43.3	36.2	19.0
1.80V	551	452	427	298	187	115	90.7	71.3	60.1	42.8	35.8	19.1
1.85V	480	412	393	284	183	112	87.2	69.7	57.7	41.5	34.7	18.1

## 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 ≤ I < 0.6C	0.6C ≤ I < 1.0C	I ≥ 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

<b>Float Service:</b>
※ Every month, recommend inspection every battery voltage.
※ Every three months, recommend equalization charge for one time.
<b>Equalization charge method:</b>
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.