



# Holy Enterprise Limited

FL.2, No.12 North Ave.1, Industrial Rd. East, Gusan, Guzhen, Zhongshan, Guangdong, China

## Specification

6-FM-20 12V20AH/20HR

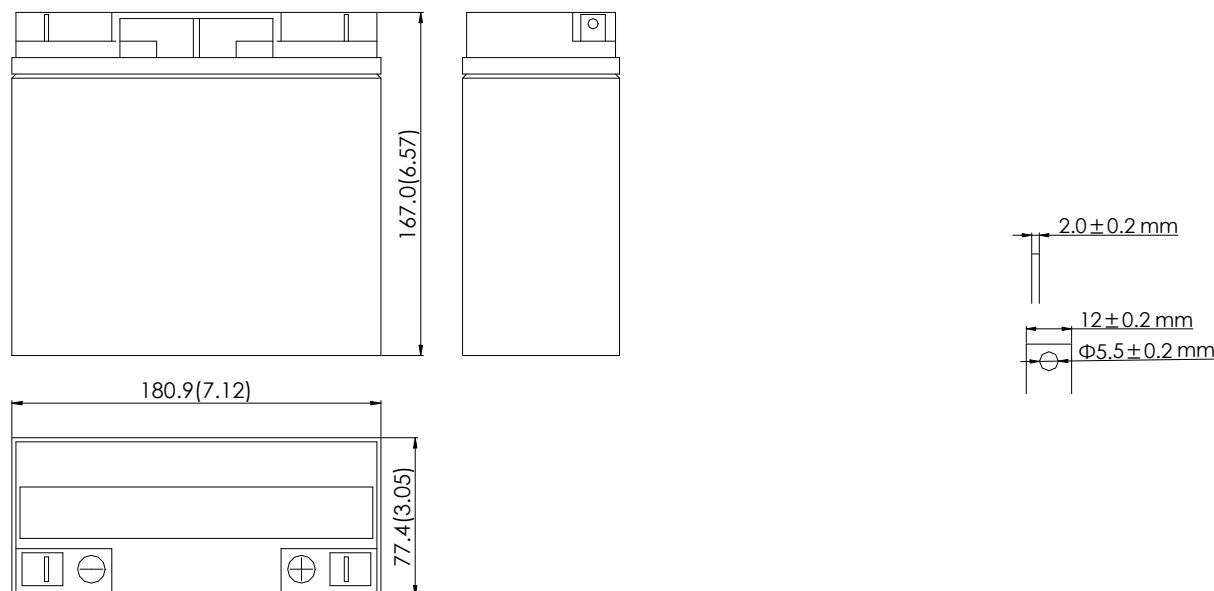
Cells Per Unit	6
Voltage Per Unit	12
Capacity	20AH@20hr-rate to 1.8V per cell @ 25°C
Weight	Approx.5.4kg (Tolerance±3%)
Max. Discharge Current	200 A(5sec)
Internal Resistance	Approx 16 mΩ
Operating Temperature	Discharge: -20°C~50°C Charge: 0°C~40°C Storage: -20°C~50°C
Normal Operating Temperature	25±3°C
Float Charging Voltage	2.25 to 2.27 VDC/unit Average at 25°C
Maximum Charging Current	6.0A
Equalization and Cycle service	2.35 to 2.40 VDC /unit Average at 25°C
Terminal	Terminal: NB



## Application

Alarm Systems  
Electronic Toys  
Medical Equipment  
Cable Television  
Communications Equipment  
Electronic Cash Registers  
Electric Test Equipment  
Emergency lighting Systems  
UPS

Dimension: 181(L) ×77(W) ×167(H) (Total 167 mm)



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

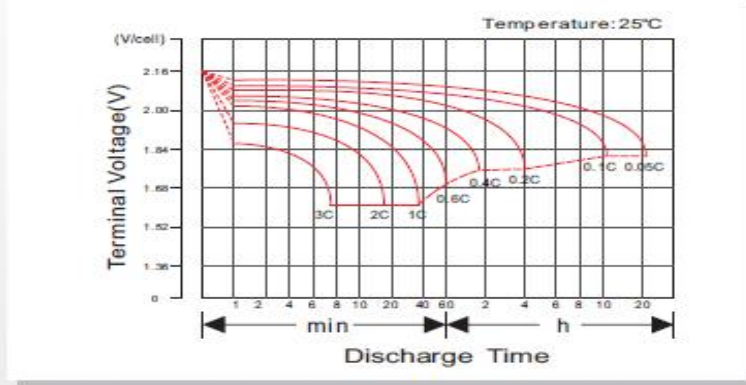
F.V/Time	5MIN	10MIN	15MIN	30MIN	60MIN	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.80V/cell	50.09	38.66	29.83	18.67	10.58	6.54	5.00	4.08	3.40	2.291	1.869	0.990
1.75V/cell	57.04	42.70	32.30	19.53	11.00	6.78	5.16	4.20	3.49	2.331	1.893	1.000
1.70V/cell	63.67	46.65	34.71	20.43	11.42	7.02	5.32	4.31	3.58	2.364	1.919	1.012
1.65V/cell	70.56	50.68	37.06	21.38	11.80	7.26	5.47	4.43	3.68	2.401	1.948	1.025
1.60V/cell	75.88	53.63	38.77	22.27	12.22	7.50	5.64	4.55	3.77	2.428	1.972	1.041

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

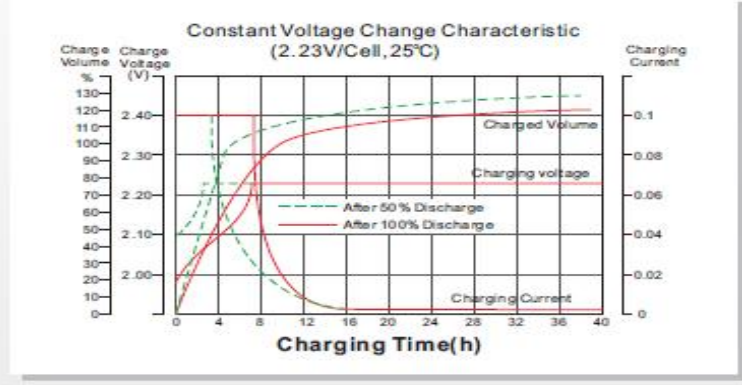
F.V/Time	5MIN	10MIN	15MIN	30MIN	60MIN	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.80V/cell	538.1	423.9	331.6	211.9	122.16	75.84	58.26	47.69	39.88	27.08	22.16	11.76
1.75V/cell	600.0	460.3	354.1	219.5	126.24	78.24	59.89	48.92	40.79	27.49	22.42	11.86
1.70V/cell	655.2	493.9	375.1	227.3	130.26	80.70	61.44	50.02	41.69	27.82	22.69	11.99
1.65V/cell	709.8	526.8	394.5	235.4	133.80	82.98	62.88	51.22	42.66	28.19	23.01	12.13
1.60V/cell	754.8	547.0	406.6	242.6	137.76	85.32	64.62	52.45	43.63	28.45	23.26	12.30

All mentioned values are average values.

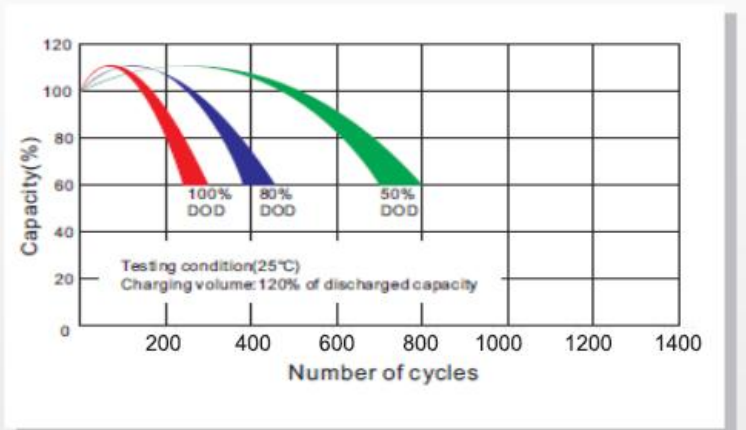
### Discharge Characteristics Curve



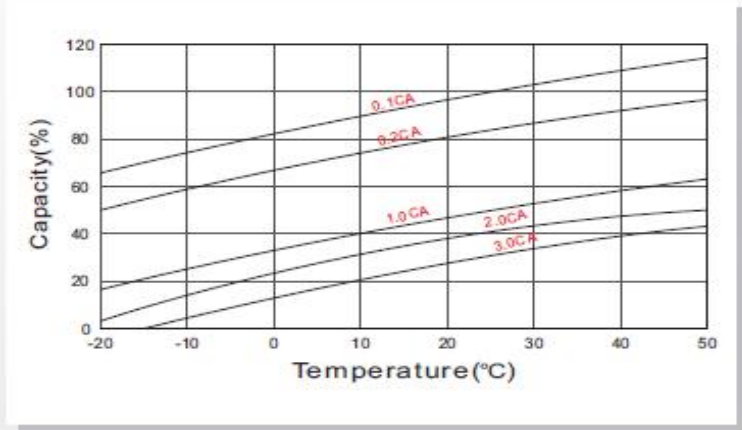
### Charging Characteristics Curve



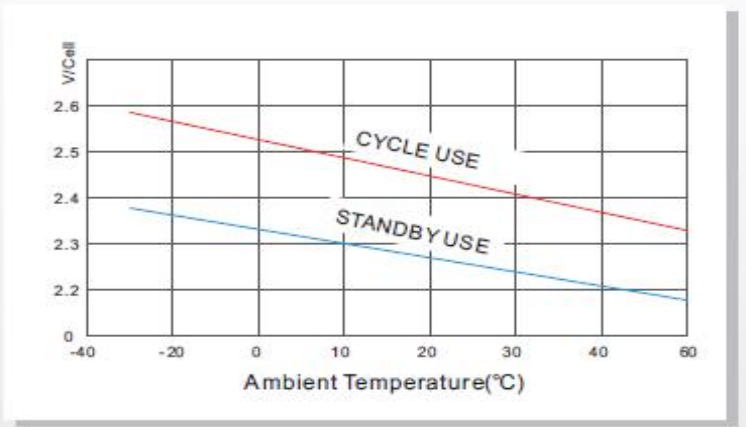
### Cycle life in relation to depth of Discharge



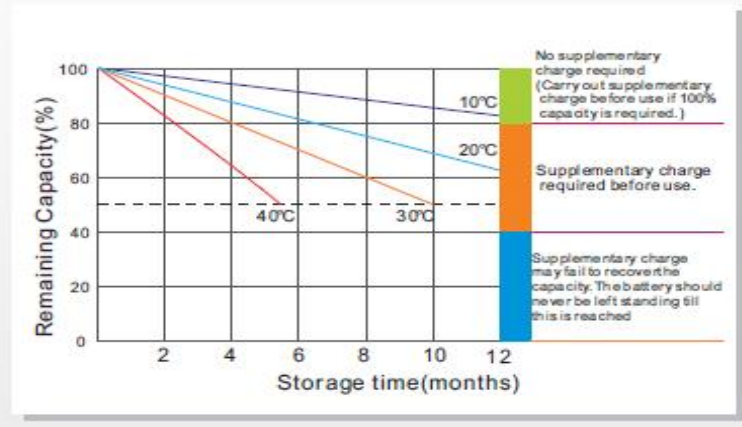
### Temperature effects on Capacity



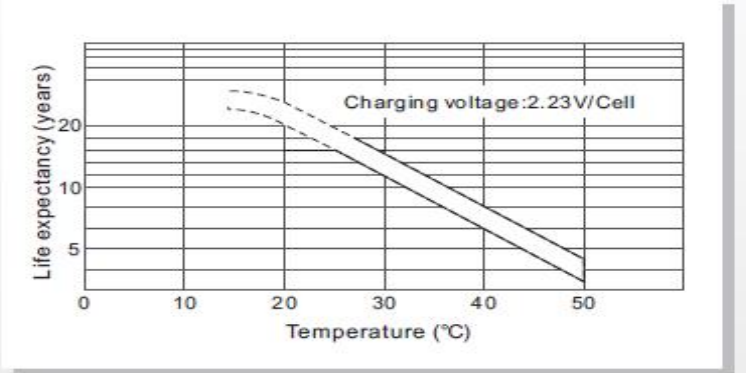
### Relationship between charging voltage and temperature



### Self-discharge Characteristics



### Temperature effects on Float life



### Life Characteristics of Standby use



### Maintenance & Cautions

- ✘ Every month, recommend inspection every battery voltage;
- ✘ Every three months, recommend equalization charge once;  
Equalization charge method:  
Discharge: 100% rate capacity discharge;  
Charge: Max. Current 0.3CA, constant voltage 2.35-2.4V/Cell;
- ✘ Effect of temperature on float charge voltage: -3mV/Cell;

### Contact Us

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