

## ACE023



### General Features

- Designed floating charging service life: 8 years (25°C)
- Sealed and maintenance free operation
- Safety valve installation for explosion proof
- Low self-discharge characteristic
- Wide operating temperature range from 0°C~40°C
- Lead Aluminum calcium Tin alloy high energy, prevent corrosion

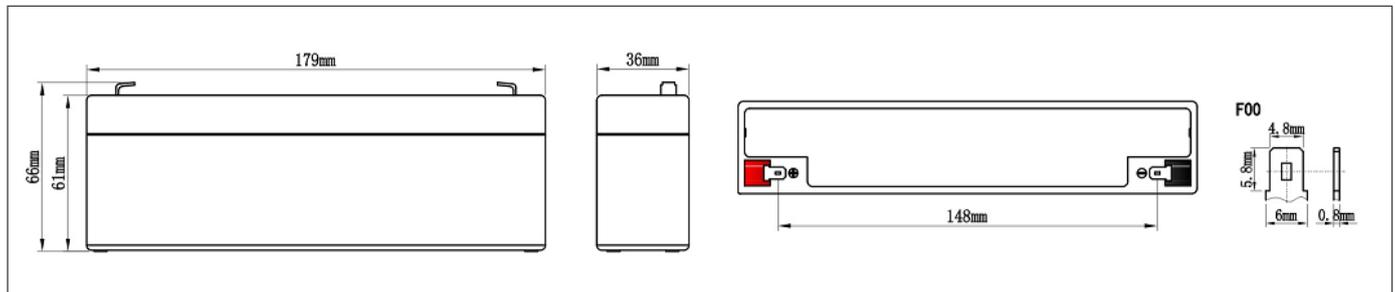
### Application

- DC power supply
- Medical equipments
- UPS/EPS power supply
- Emergency lighting systems
- Alarm and security systems

### Physical Specifications

Nominal Voltage	Nominal Capacity (20HR)	Dimension				Weight ±3%	Internal Resistance (In full charge status)	Standard Terminals
		L	W	H	TH			
12V	2.2AH	179±2mm	36±1mm	61±2mm	66±2mm	Approx0.86kg (1.89lbs)	≈70 mΩ	F00 (standard)

### Dimensions



### Constant-Voltage Charge

Rated Capacity	
20 hour rate (0.11A)	2.20AH
10 hour rate (0.22A)	2.07AH
5 hour rate (0.374A)	1.90AH
27 minute rate (2.2A)	1.10AH
7 minute rate (6.6A)	0.80AH
Capacity affected by Temperature	
40°C(104°F)	103%
25°C(77°F)	100%
0°C(32°F)	86%

Cycle Application
1. Limit initial current less than 0.575A.
2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77°F).
3. Hold at 14.1V to 14.4V until current drop to under 0.0132A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -30mV/°C.
Standby Service
1. Hold battery across constant voltage source of 13.6to 13.8 volts with current limit 0.55A continuously .When held at this voltage , the battery will seek its own current level and maintain itself in a fully charge status.
2. Temperature compensation coefficient of charging voltage is -18mV/°C.

⚠ NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

### Battery Discharge Table

End Voltage (V)	Minute (M)				Hour (H)							
	10	15	30	45	1	1.5	2	3	5	8	10	20
<b>Constant Current Discharge Data Sheet (@25°C) Unit: A</b>												
9.6V	6.05	4.74	2.42	1.71	1.44	1.14	0.849	0.643	0.415	0.275	0.215	0.118
9.9V	5.76	4.52	2.31	1.65	1.40	1.12	0.828	0.627	0.405	0.269	0.213	0.117
10.2V	5.49	4.30	2.20	1.60	1.37	1.09	0.808	0.612	0.395	0.264	0.211	0.116
10.5V	5.44	4.26	2.18	1.59	1.36	1.07	0.777	0.591	0.386	0.262	0.209	0.115
10.8V	5.39	4.22	2.16	1.57	1.35	1.05	0.746	0.568	0.375	0.259	0.207	0.114
<b>Constant Power Discharge Data Sheet (@25°C) Unit: W</b>												
9.6V	73.0	59.1	33.4	23.7	17.7	13.5	10.2	7.27	4.79	3.34	2.65	1.43
9.9V	69.6	56.3	31.8	22.9	17.2	13.2	9.93	7.09	4.67	3.27	2.63	1.41
10.2V	66.3	53.6	30.3	22.1	16.8	12.9	9.69	6.92	4.56	3.21	2.60	1.40
10.5V	64.1	52.1	29.7	21.6	16.5	12.7	9.56	6.76	4.52	3.18	2.56	1.38
10.8V	61.7	50.4	28.8	21.0	16.3	12.5	9.42	6.64	4.46	3.15	2.52	1.36

### Performance Characteristics

