



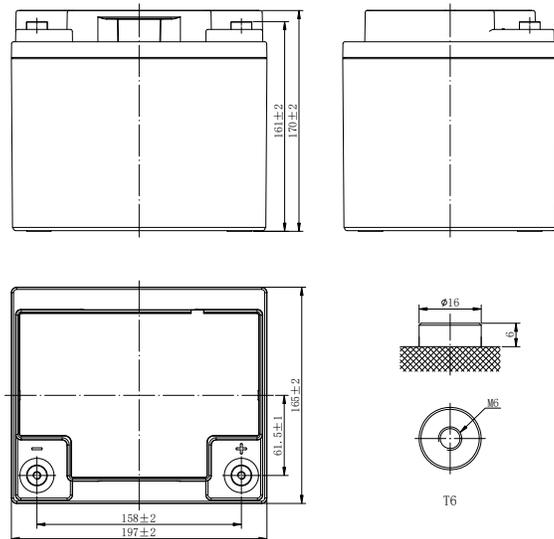
EV SERIES-GENERAL PURPOSE

EV-12V45Ah (12V45Ah)



CHARACTERISTICS

Specifications	
Item	12V
Rated Voltage	C10, 1.80V/cell 45Ah
Nominal Capacity (25°C)	Length 197mm (7.76inches)
	Width 165mm (6.50inches)
Dimension	Container Height 170mm (6.69inches)
	Total Height 170mm (6.69inches)
	Approx Weight 13.2kg (29.1lbs)
Terminal	T6(M6)
Container Material	ABS (UL94 HB)
Short-circuit current	1125A
Internal Resistance (25°C)	Approx 9 mΩ (Fully charged)
Operating Temp. Range	Discharge -15~50°C (5~122°F)
	Charge -20~40°C (-4~104°F)
	Storage -15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)
Max. Charging Current (25°C)	0.3C
Charge voltage (25°C)	Standby Use 2.25-2.30V/cell
	Cycle Use 2.35-2.40V/cell
Temp. Coefficient	-3mV/cell/°C
	-5mV/cell/°C
Effect of temp. to Capacity	40°C (104°F) 103%
	25°C (77°F) 100%
	0°C (32°F) 86%



≤3% per month at 25°C (77°F).

EV series batteries may be stored up to 6 months at 25°C (77°F) and then a freshening charge is required.

Self Discharge

For higher temperatures the time interval will be shorter.

DISCHARGE TABLE

Constant Current Discharge (Amperes) at 25°C (77°F)														
F. V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	63.3	54.9	43.2	40.2	32.6	24.9	15.2	11.1	8.73	7.57	5.96	5.13	4.25	2.26
1.80V/cell	71.9	62.2	48.8	43.7	34.8	25.8	15.7	12.1	9.32	7.97	6.27	5.40	4.50	2.34
1.75V/cell	78.0	67.4	52.7	44.6	35.9	27.1	16.5	12.3	9.49	8.11	6.34	5.43	4.52	2.36
1.70V/cell	83.1	71.6	55.9	45.5	36.6	27.6	16.8	12.5	9.66	8.24	6.44	5.51	4.54	2.39
1.65V/cell	85.8	73.6	57.4	46.2	37.1	28.0	17.1	12.7	9.81	8.41	6.55	5.59	4.60	2.42
1.60V/cell	88.7	75.9	58.9	46.9	37.7	28.4	17.3	12.8	9.92	8.53	6.64	5.66	4.66	2.44
Constant Power Discharge (Watts/cell) at 25°C (77°F)														
F. V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	119.2	104.0	82.1	76.8	62.5	48.1	29.5	21.7	17.1	14.9	11.8	10.2	8.46	4.49
1.80V/cell	133.3	116.3	91.9	82.9	66.3	49.6	30.3	23.5	18.2	15.6	12.3	10.4	8.85	4.65
1.75V/cell	142.3	124.1	98.1	84.0	67.9	51.8	31.8	23.9	18.5	15.8	12.4	10.5	8.92	4.69
1.70V/cell	149.6	130.5	103.1	84.9	68.8	52.6	32.3	24.2	18.7	16.1	12.5	10.6	9.01	4.73
1.65V/cell	152.0	132.6	104.8	85.5	69.3	53.0	32.6	24.4	19.0	16.3	12.8	11.0	9.11	4.79
1.60V/cell	154.1	134.5	106.2	85.9	69.7	53.4	32.9	24.5	19.1	16.5	12.9	11.1	9.20	4.84

APPLICATIONS

- All purpose
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply
- Auto control system

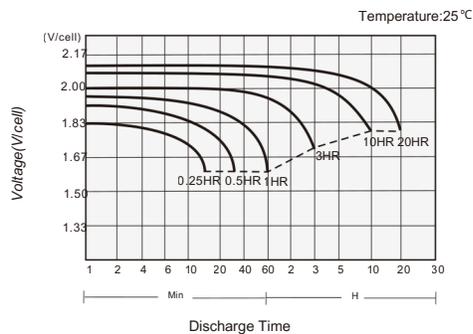
GENERAL FEATURES

- 10 years design life (25°C)
- Lead calcium alloy, sealed design, no watering required
- Puncture resistant micro-porous glass mat separators extend life
- Unique technology optimizes power capacity, cell consistency, and long-term reliability
- Designed for a wide range of applications

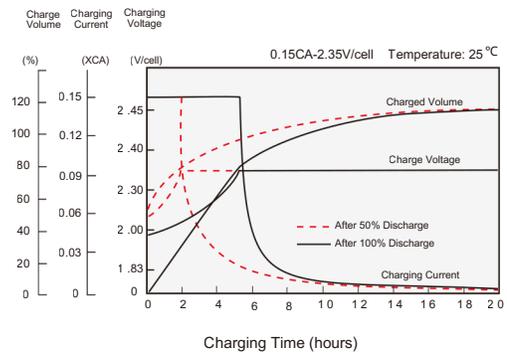
STANDARDS

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Approved
- Certified production facilities, IATF 16949, ISO 45001, ISO 9001 and ISO 14001.

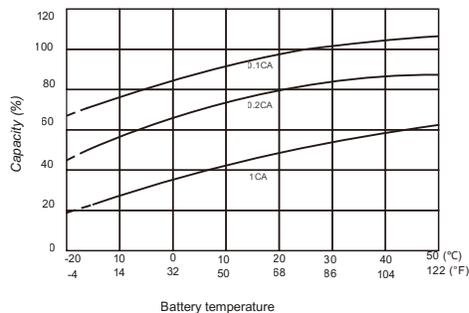
Discharge Characteristics



Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics

