



EV SERIES-GENERAL PURPOSE

EV-12V18Ah (12V18Ah)



CHARACTERISTICS

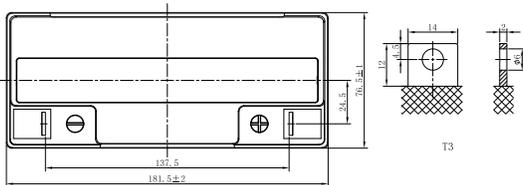
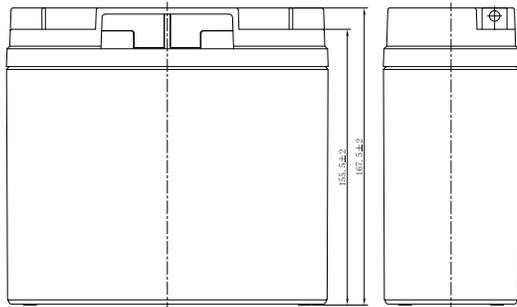
Specifications	
Item	12V
Rated Voltage	C20, 1.75V/cell 18Ah
Nominal Capacity (25°C)	Length 181.5mm (7.15inches)
	Width 76.5mm (3.01inches)
Dimension	Container Height 167.5mm (6.59inches)
	Total Height 167.5mm (6.59inches)
Approx Weight	5.4kg (11.9lbs)
Terminal	T3
Container Material	ABS (UL94 HB)
Short-circuit current	504A
Internal Resistance (25°C)	Approx 16 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).

Self Discharge

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

For higher temperatures the time interval will be shorter.



DISCHARGE TABLE

Constant Current Discharge (Amperes) at 25°C (77°F)																
F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	49.1	33.7	26.2	21.9	16.6	12.3	10.2	7.54	5.99	4.37	3.52	3.02	2.58	2.03	1.66	0.880
1.80V/cell	52.8	35.7	27.5	22.7	17.1	12.6	10.4	7.69	6.10	4.44	3.57	3.06	2.62	2.06	1.69	0.890
1.75V/cell	55.7	37.1	28.4	23.4	17.5	12.9	10.6	7.84	6.21	4.52	3.62	3.10	2.65	2.09	1.70	0.900
1.70V/cell	58.3	38.6	29.4	24.0	18.0	13.2	10.8	7.97	6.30	4.58	3.67	3.14	2.68	2.11	1.72	0.907
1.67V/cell	60.3	39.7	30.1	24.5	18.3	13.4	11.0	8.07	6.37	4.63	3.71	3.17	2.71	2.12	1.73	0.914
1.60V/cell	64.0	41.4	31.1	25.3	18.8	13.7	11.2	8.24	6.50	4.71	3.77	3.22	2.75	2.15	1.75	0.924
Constant Power Discharge (Watts/cell) at 25°C (77°F)																
F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	93.0	64.1	50.2	42.1	32.1	23.8	19.8	14.7	11.7	8.59	6.94	5.95	5.11	4.03	3.31	1.76
1.80V/cell	99.0	67.5	52.4	43.6	32.9	24.4	20.2	15.0	11.9	8.72	7.03	6.03	5.18	4.09	3.35	1.78
1.75V/cell	103.2	69.7	53.8	44.5	33.6	24.8	20.5	15.2	12.1	8.83	7.12	6.10	5.23	4.13	3.38	1.80
1.70V/cell	107.0	72.0	55.2	45.6	34.3	25.3	20.8	15.4	12.2	8.95	7.20	6.17	5.29	4.17	3.41	1.81
1.67V/cell	109.8	73.6	56.4	46.4	34.8	25.6	21.1	15.6	12.4	9.02	7.26	6.22	5.33	4.20	3.43	1.83
1.60V/cell	114.2	75.8	57.9	47.6	35.6	26.1	21.5	15.9	12.6	9.17	7.37	6.30	5.40	4.25	3.47	1.85

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

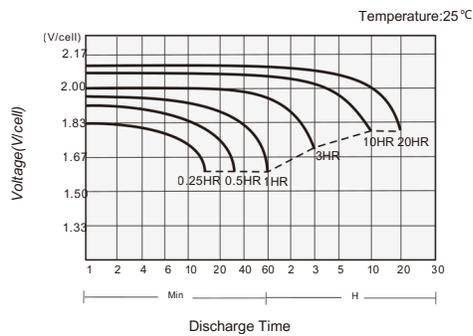
GENERAL FEATURES

- 5 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

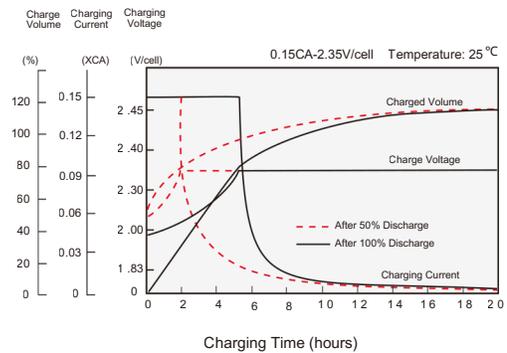
STANDARDS

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

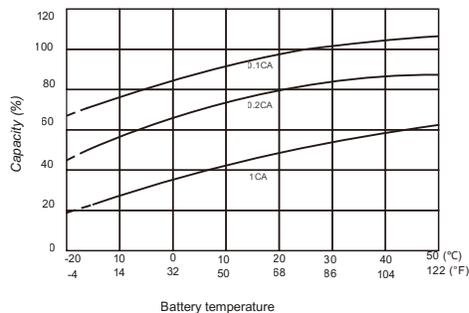
Discharge Characteristics



Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics

