



EM Series

EM12-150(12V150Ah)

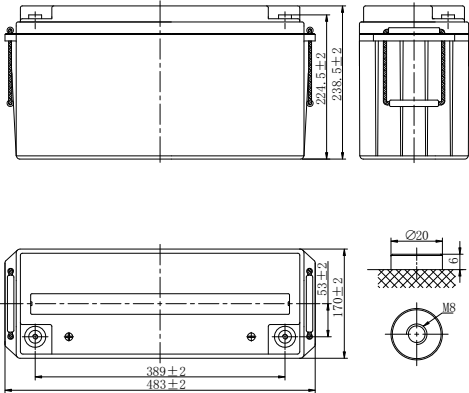


Specifications

Rated Voltage	12V	
Nominal Capacity	C ₂₀ , 1.75V/cell	150Ah
Dimension	Length	483±2mm (19.0 inches)
	Width	170±2mm (6.69 inches)
	Container Height	238.5±2mm (9.39 inches)
	Total Height	238.5±2mm (9.39 inches)
Approx Weight	41.5kg (91.5 lbs)	
Terminal	M8	
Container Material	ABS	
Rated Capacity(25°C)	150.0 Ah	C20(7.50A, 1.75V/cell)
	138.0 Ah	C10(13.8A, 1.75V/cell)
	122.5 Ah	C5(24.5A, 1.75V/cell)
	110.4 Ah	C3(36.8A, 1.75V/cell)
	92.0 Ah	C1(92.0A, 1.60V/cell)
Max. Discharge Current	1500A (5s)	
Internal Resistance(25°C)	Approx 4.0mΩ	
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)	
Standby Use	Initial Charging Current less than 37.5A. Voltage	
	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Cycle Use	Initial Charging Current less than 37.5A. Voltage	
	14.1V~14.4V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	EM series batteries may be stored for 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.	



Layout



Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	110.0	83.7	72.2	54.7	43.9	33.1	26.5	22.2	19.3	15.3	12.7	7.02
1.80V/cell	124.4	93.6	80.0	59.8	47.8	35.8	28.5	23.9	20.7	16.4	13.6	7.41
1.75V/cell	130.0	97.4	82.9	61.8	49.3	36.8	29.3	24.5	21.2	16.7	13.8	7.50
1.70V/cell	135.7	101.1	86.0	63.9	50.9	37.8	30.0	25.0	21.6	16.9	14.0	7.59
1.67V/cell	139.1	103.4	87.8	65.1	51.7	38.4	30.4	25.3	21.9	17.1	14.1	7.65
1.60V/cell	147.0	108.8	92.0	68.0	53.9	39.8	31.4	26.1	22.5	17.5	14.4	7.79

Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	212.6	162.4	140.4	106.6	85.9	64.9	52.0	43.7	38.1	30.2	25.2	14.0
1.80V/cell	238.3	180.2	154.4	115.9	93.0	69.9	55.9	46.9	40.7	32.2	26.9	14.7
1.75V/cell	247.0	186.1	158.9	119.1	95.3	71.5	57.1	47.8	41.5	32.8	27.2	14.9
1.70V/cell	255.5	191.7	163.6	122.4	97.8	73.2	58.3	48.8	42.3	33.3	27.6	15.1
1.67V/cell	260.6	195.0	166.3	124.1	99.1	74.1	59.0	49.3	42.7	33.6	27.8	15.2
1.60V/cell	271.8	202.9	172.7	128.6	102.5	76.4	60.6	50.6	43.7	34.3	28.3	15.4



EM Series

EM12-150(12V150Ah)



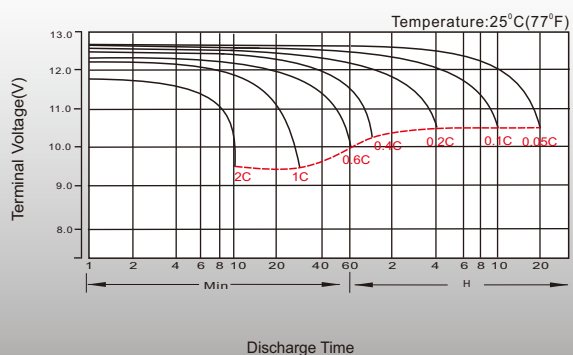
Applications

- 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

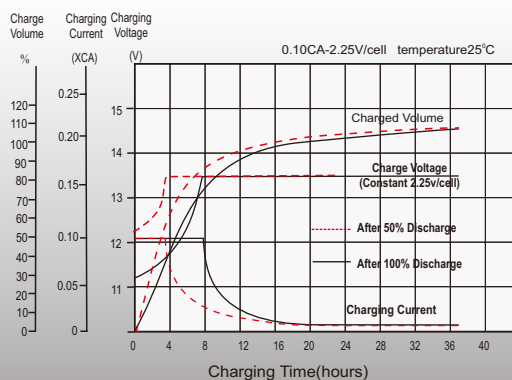
General Features

- 10 years design life(25°C)
- Special exhaust structure and sealing technology, safe and reliable, flexible installation, convenient maintenance
- PbCaSn alloy for plate grids: less gassing, less self-discharging
- High quality AGM separator: extend cycle life and prevent micro short circuit
- High purity raw material: ensure low self discharge rate

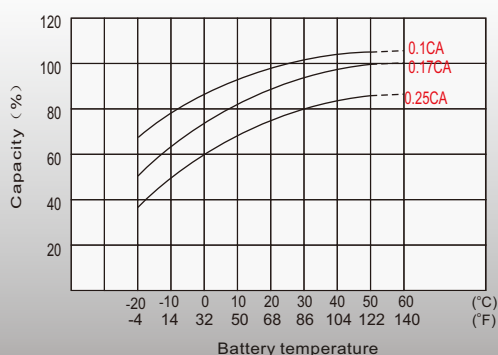
Discharge Characteristics



Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life

