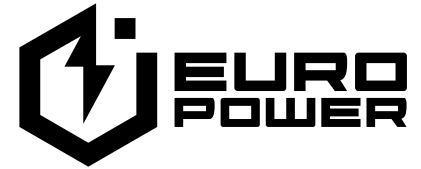


# EP12-100M8

## 12V100Ah



### Specification

Nominal Voltage	12V		
Nominal Capacity( 10HR)	100AH		
Dimension	Length	329	3mm (12.9 5 inches)
	Width	172	2mm (6. 77 inches)
	Container Height	214	2mm (8. 43 inches)
	Total Height (with Terminal)	243	2mm (9.57 inches)
Approx Weight	Approx 28.1 kg ( 61.95lbs)		
Terminal	T11/T10		
Container Material	ABS		
Rated Capacity	104.0AH/5.20A	(20hr ,1.80V/cell,25 $\times$ /77 $\times$ )	
	100.0AH/10.0A	(10hr,1.80V/cell,25 $\times$ /77 $\times$ )	
	86.0AH/17.2A	(5hr,1.75V/cell,25 $\times$ /77 $\times$ )	
	78.0AH/26.0A	(3hr,1.75V/cell,25 $\times$ /77 $\times$ )	
	61.0AH/61.0A	(1hr,1.60V/cell,25 $\times$ /77 $\times$ )	
Max. Discharge Current	1200A (5s)		
Internal Resistance	Approx 4.8m $\Omega$		
Operating Temp.Range	Discharge :	-15	50 $\times$ (5 122 $\times$ )
	Charge :	0	40 $\times$ (32 104 $\times$ )
	Storage :	-15	40 $\times$ (5 104 $\times$ )
Nominal Operating Temp. Range	25 3 $\times$ (77 5 $\times$ )		
Cycle Use	Initial Charging Current less than 30.0A.Voltage 14.4V~15.0V at 25 $\times$ (77 $\times$ )Temp. Coefficient -30mV/ $\times$		
Standby Use	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25 $\times$ (77 $\times$ )Temp. Coefficient -20mV/ $\times$		
Capacity affected by Temperature	40 $\times$ (104 $\times$ )	103%	
	25 $\times$ ( 77 $\times$ )	100%	
	0 $\times$ ( 32 $\times$ )	86%	
Self Discharge	E P series batterys may be stored for up to 6 months at 25 $\times$ (77 $\times$ ) and then a freshening charge is required. For higher temperatures the time interval will be shorter.		

### Applications

- ◆ All purpose
- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto controlsystem

ISO 9001 ISO 14001 OHSAS 18001



### Constant Current Discharge (Amperes) at 25 $\times$ (77 $\times$ )

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	171.2	134.6	114.4	95.7	76.1	57.6	47.1	30.0	23.7	19.4	15.6	13.6	11.0	9.44	5.15
1.80V/cell	229.7	171.9	138.3	113.1	89.8	67.0	52.8	32.8	25.6	20.7	16.8	14.6	11.7	10.0	5.20
1.75V/cell	259.0	188.9	151.0	121.7	93.2	69.5	55.3	34.0	26.0	21.2	17.2	15.0	11.9	10.1	5.25
1.70V/cell	285.2	205.9	161.2	127.9	97.0	72.3	57.0	35.3	26.8	21.7	17.7	15.3	12.1	10.2	5.35
1.65V/cell	314.5	222.2	171.4	135.9	102.3	74.1	58.9	36.3	27.9	22.5	18.1	15.6	12.3	10.4	5.42
1.60V/cell	346.9	241.3	183.4	144.8	108.0	77.2	61.0	37.6	28.7	23.2	18.7	16.0	12.4	10.5	5.45

### Constant Power Discharge (Watts) at 25 $\times$ (77 $\times$ )

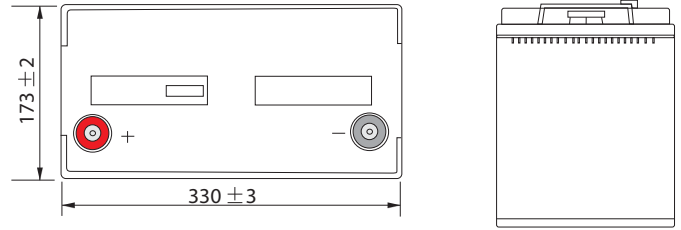
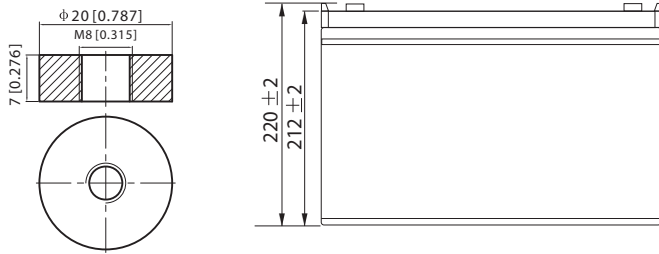
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	312.9	248.6	213.5	180.4	145.0	110.7	90.9	58.3	46.3	37.9	30.6	26.8	21.8	18.7	10.2
1.80V/cell	415.6	313.9	254.5	210.1	168.5	127.7	101.3	63.2	49.5	40.3	32.8	28.6	23.1	19.8	10.3
1.75V/cell	458.6	339.3	274.6	223.9	173.5	131.3	105.5	65.3	50.2	41.0	33.5	29.3	23.4	19.9	10.4
1.70V/cell	491.0	361.5	289.1	233.5	179.5	136.0	108.5	67.8	51.5	42.0	34.3	29.8	23.7	20.1	10.6
1.65V/cell	533.7	386.5	305.0	246.2	187.8	138.1	111.3	69.3	53.5	43.3	35.1	30.4	24.0	20.5	10.7
1.60V/cell	575.1	410.1	320.8	259.4	196.9	143.2	114.7	71.2	54.9	44.5	36.2	31.0	24.2	20.7	10.8

**Note** The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.

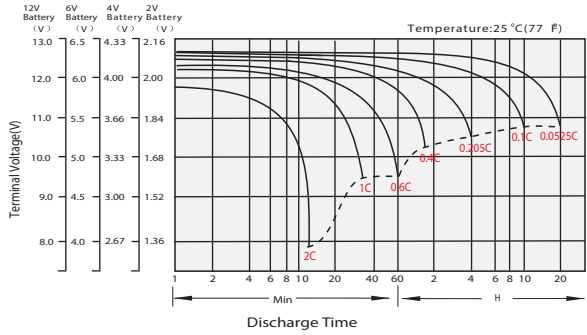
# EP12-100M8 12V100Ah

## Dimensions

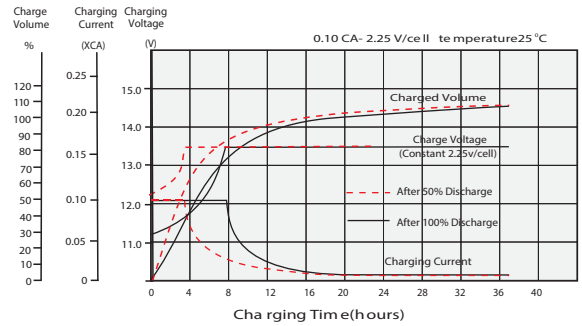
### T11 Terminal Unit: mm [inches]



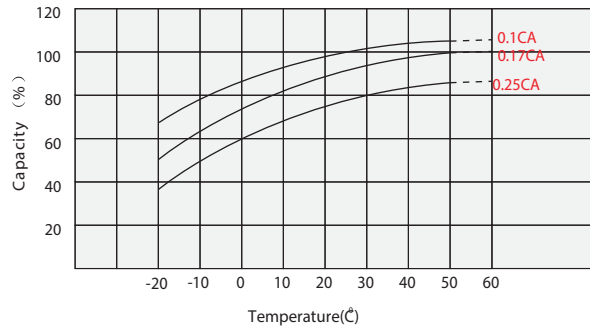
## Discharge Characteristics



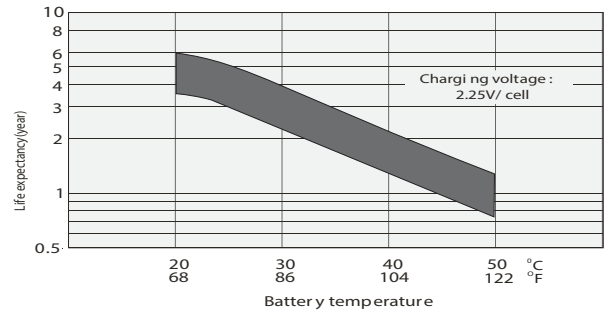
## Float Charging Characteristics



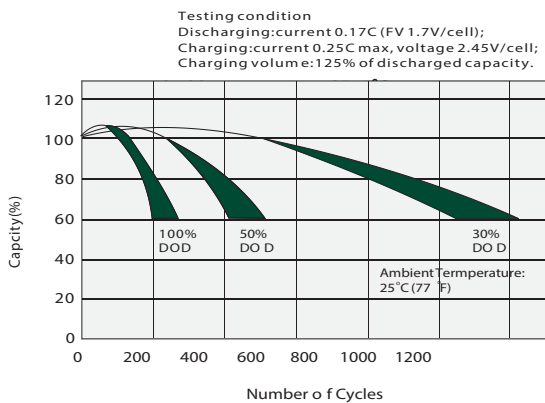
## Temperature Effects in Relation to Battery Capacity



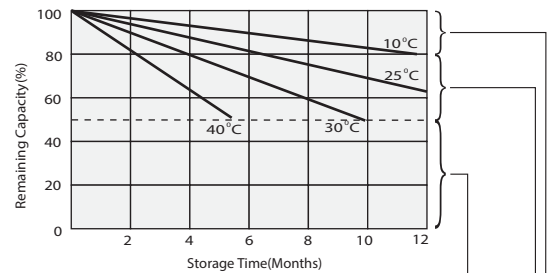
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## Self Discharge Characteristics



Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is recharged.

Supplementary charge required before use. Optional charging way as below:  
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.  
3. Charged for 8-10 hours at limited current 0.05CA.

No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required.)