



# EV12-8 (12V 8Ah)

Specifications	
Rated Voltage	12
Nominal Capacity	8Ah@10hr-rate
Dimensions	Length 151 mm
	Width 65 mm
	Container Height 93.5 mm
	Total Height 99 mm
Approx. Weight	Approx 2.39 Kg (5.27 lbs)
Terminal	T2
Layout	3
Container material	ABS
Rated Capacity (25°C)	8.58 AH/0.43A (20hr,1.80V/cell,25°C /77°F)
	8.00 AH/0.80A (10hr,1.80V/cell,25°C /77°F)
	7.02 AH/1.40A (5hr,1.75V/cell,25°C /77°F)
	6.36 AH/2.12A (3hr,1.75V/cell,25°C /77°F)
	5.17 AH/5.17A (1hr,1.60V/cell,25°C /77°F)
Max. Discharge Current	120A (5s)
Internal Resistance	Approx 18.0mΩ
	Discharge: -15°C~50°C
Operating Temp. Range	Charge: 0°C~40°C
	Storage: -15°C~40°C
Nominal Operating Temp. Range	25±3°C (77±5°F)
Cycle Use	Initial Charging Current less than 2.4A.Voltage
	14.4V~15.0V at 25°C (77 °F) Temp. Coefficient -30mV/°C
Standby Use	No limit on Initial Charging Current Voltage
	13.5V~13.8V at 25°C (77°F)0 Temp. Coefficient -20mV/°C
Effect Of Temp. To Capacity	40°C (104°F) 103%
	25°C (77°F) 100%
	0°C (32°F) 86%
Self Discharge	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.



### Description and Features

VRLA EV Series is specially designed for frequent discharge in deep cycle applications. EV batteries offer reliable performance in high load situations and have a high cycle durability due to the specially designed active material, strong grids and thick plate construction. The addition of carbon ensures faster full recharging of the battery and longer battery life. This stable and durable battery is completely sealed and maintenance free.

### Features

- Absorbent Glass Mat technology
- Long service life – 50% more cycles than VRLA AGM
- Faster full recharging – quick use of application
- Suitable for (deep) cycle applications

Layout	Terminal	UL certification
	<p>■ T2 Terminal Unit: mm [inches]</p>	

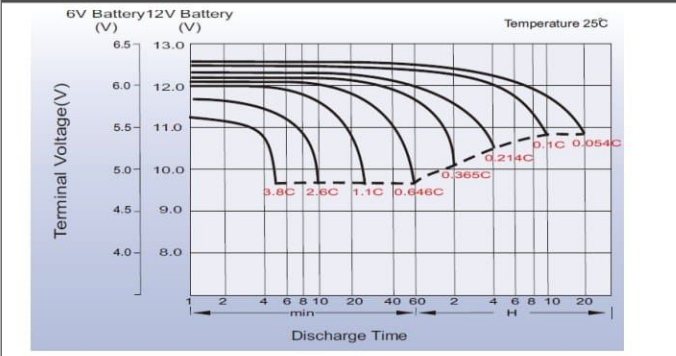
Constant Current Discharge Characteristics: A (25°C)														
F.V/Time	10 Min	15 Min	20 Min	30 Min	45 Min	1 Hr	2 Hr	3 Hr	4 Hr	5 Hr	6 Hr	8 Hr	10 Hr	20 Hr
1.60V	21.0	15.8	13.0	8.80	6.60	5.17	3.10	2.34	1.87	1.53	1.30	1.02	0.84	0.449
1.65V	19.3	14.8	12.2	8.34	6.33	4.99	3.00	2.27	1.82	1.48	1.28	1.01	0.83	0.446
1.70V	17.9	13.9	11.5	7.90	6.18	4.83	2.92	2.18	1.76	1.44	1.25	0.99	0.82	0.441
1.75V	16.4	13.0	11.0	7.59	5.94	4.68	2.81	2.12	1.71	1.40	1.22	0.98	0.81	0.433
1.80V	15.0	11.9	10.2	7.31	5.72	4.47	2.71	2.08	1.67	1.37	1.19	0.96	0.80	0.429
1.85V	11.7	9.9	8.61	6.20	4.92	3.99	2.48	1.93	1.57	1.27	1.11	0.91	0.76	0.425

Constant Power Discharge Characteristics: Wpc (25°C)														
F.V/Time	10 Min	15 Min	20 Min	30 Min	45 Min	1 Hr	2 Hr	3 Hr	4 Hr	5 Hr	6 Hr	8 Hr	10 Hr	20 Hr
1.60V	36.7	28.3	23.7	16.3	12.4	9.80	5.92	4.49	3.61	2.96	2.55	2.00	1.66	0.893
1.65V	34.4	26.8	22.5	15.6	12.0	9.54	5.77	4.38	3.52	2.88	2.50	1.99	1.64	0.889
1.70V	32.1	25.4	21.3	14.9	11.8	9.26	5.63	4.22	3.41	2.80	2.45	1.96	1.61	0.879
1.75V	29.9	23.9	20.4	14.3	11.3	9.00	5.42	4.11	3.33	2.74	2.41	1.93	1.60	0.864
1.80V	27.6	22.1	19.1	13.9	11.0	8.63	5.25	4.05	3.26	2.68	2.34	1.90	1.58	0.857
1.85V	21.9	18.8	16.4	11.9	9.52	7.75	4.83	3.78	3.07	2.50	2.19	1.79	1.50	0.850

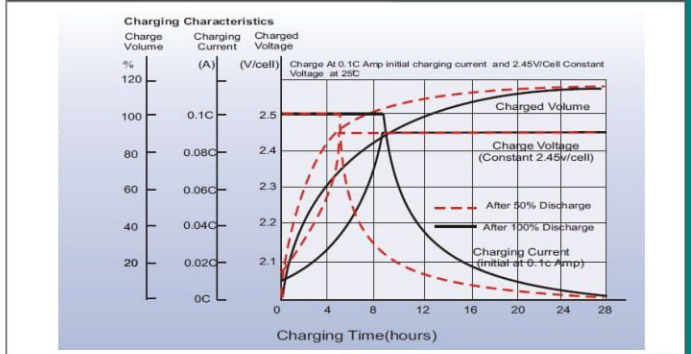


# EV12-8 (12V 8Ah)

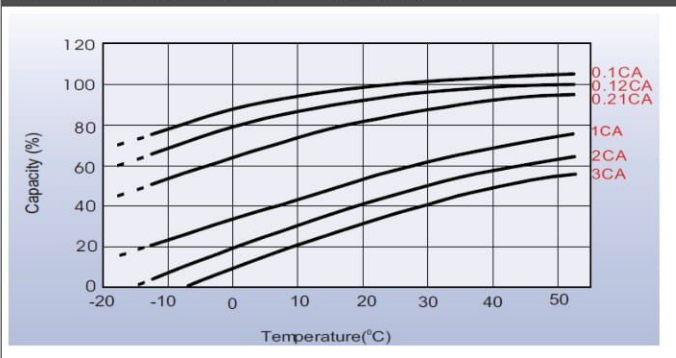
## Discharge Characteristics



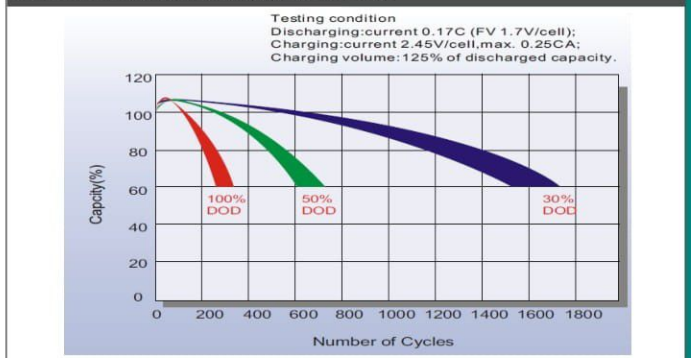
## Charging Characteristics (cycle use)



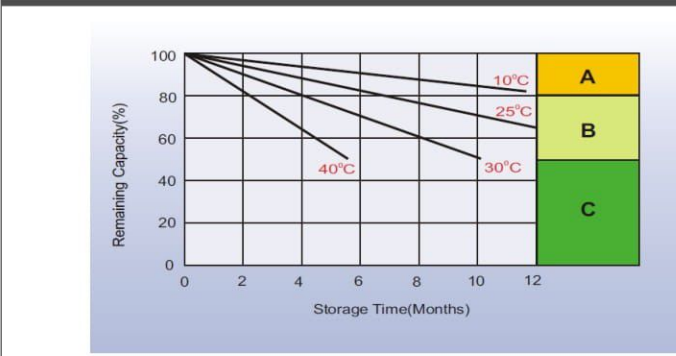
## Temperature Effects In Relation To Battery Capacity



## Cycle Life in Relation to Depth of Discharge



## Self Discharge Characteristics



## Self Discharge Characteristics

- A** No supplementary charge required  
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:  
1. Charged for above 3 days at limited current 0.25CA and constant volatge 2.25V/cell.  
2. Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.  
3. Charged for 8~10hours at limited current 0.05CA .
- C** Supplementary charge may often fail to recover the capacity.  
The battery should never be left standing till this is reached.

(Note) All above information shall be changed without prior notice, Landport Batteries reserves the right to explain and update the latest information.