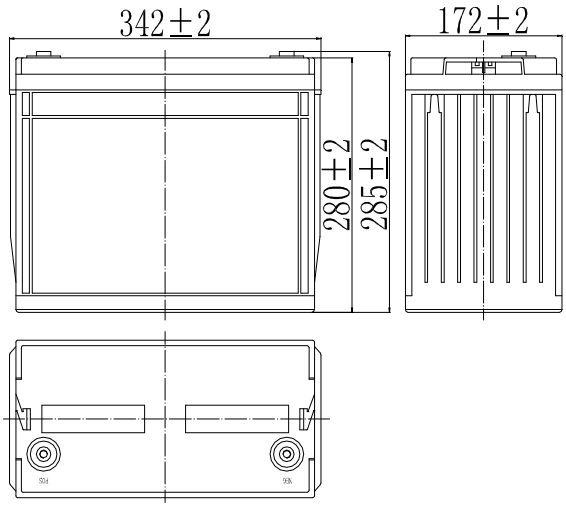
Firstpower
Datasheet LFP12140HR 12V 500W

Specifications

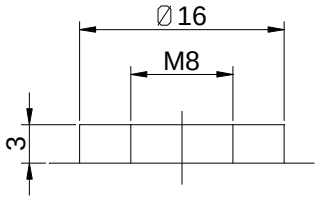
Nominal Voltage		12 V
Number of cell		6 cells
Capacity(10HR, 25℃)		140 Ah
Capacity(15min.rate, 25℃)		500 Watts/cell
Dimension	Length	342±2mm (13.46inch)
	Width	172±2mm (6.77inch)
	Height	280±2mm (11.02inch)
	Total Height	285±2mm (11.22inch)
Approx. Weight		46kg (101.4lbs)±4%
Terminal type		T11
Internal resistance (Fully charged, 25℃)		Approx. 3.2mΩ
Capacity affected by temperature (20HR)	40℃	102%
	25℃	100%
	0℃	85%
	-15℃	65%
Self-discharge (25℃)	3 month	Remaining Capacity: 91%
	6 month	Remaining Capacity: 82%
	12 month	Remaining Capacity: 65%
Nominal operating temperature		25℃±3℃(77℉±5℉)
Operating temperature range	Discharge	-15℃～50℃(5℉～122℉)
	Charge	-10℃～50℃(14℉～122℉)
	Storage	-20℃～50℃(-4℉～122℉)
Float charging voltage(25℃)		13.50 to 13.80V Temperature compensation: -18mV/℃
Cyclic charging voltage(25℃)		14.50 to 14.90V Temperature compensation: -30mV/℃
Maximum charging current		42A
Terminal material		Copper
Maximum discharge current		1100A(5 sec.)
Designed floating life(20℃)		7~10 years

- ◆ Absorbent glass mat technology;
- ◆ Recognized by UL & CE;
- ◆ ABS container.

Dimensions



Terminal



Terminal T11

Constant Current Discharge Characteristics (A, 25℃)

F.V/TIME	15min	20min	30min	45min	60min	2h	3h	4h	5h	10h	20h
1.60V/cell	267	214	151	113	92.0	51.2	36.7	29.6	25.7	14.4	7.62
1.65V/cell	261	209	148	111	90.6	50.9	36.5	29.4	25.6	14.4	7.61
1.67V/cell	259	205	147	109	89.7	50.7	36.4	29.3	25.5	14.4	7.60
1.70V/cell	251	201	144	107	88.3	50.4	36.2	29.2	25.4	14.3	7.59
1.75V/cell	243	194	140	105	86.6	49.6	36.0	29.0	25.2	14.2	7.54
1.80V/cell	230	184	135	101	83.9	48.4	34.9	28.1	24.4	14.1	7.49

Constant Power Discharge Characteristics (Watt/cell, 25℃)

F.V/TIME	15min	20min	30min	45min	60min	2h	3h	4h	5h	10h	20h
1.60V/cell	516	412	292	218	178	100	72.3	58.2	50.9	28.8	15.2
1.65V/cell	503	403	286	213	175	99.2	71.9	57.9	50.6	28.7	15.2
1.67V/cell	500	396	283	211	173	98.9	71.7	57.7	50.4	28.7	15.2
1.70V/cell	485	388	278	207	170	98.3	71.4	57.5	50.2	28.6	15.2
1.75V/cell	468	374	271	202	167	96.8	70.9	57.1	49.9	28.5	15.1
1.80V/cell	443	355	261	194	162	94.3	68.8	55.4	48.4	28.3	15.0

Note: The above characteristics data can be obtained within three charge/discharge cycles.

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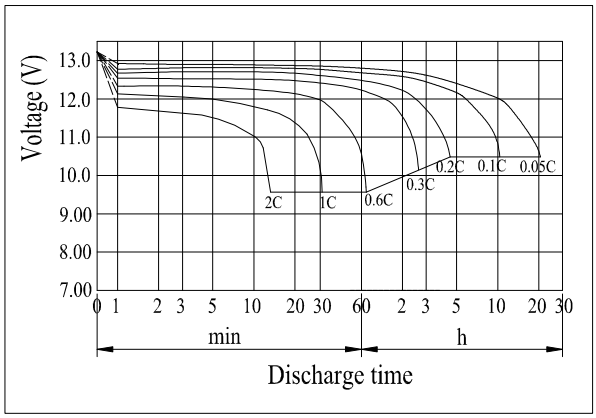
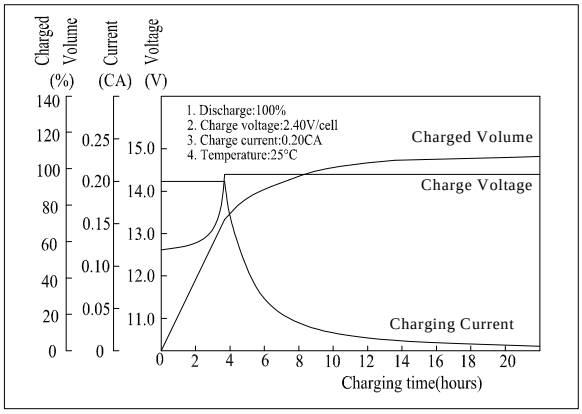
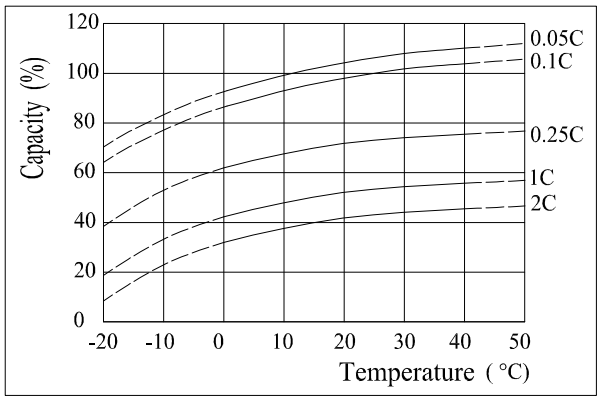
Discharge Characteristics(25℃)



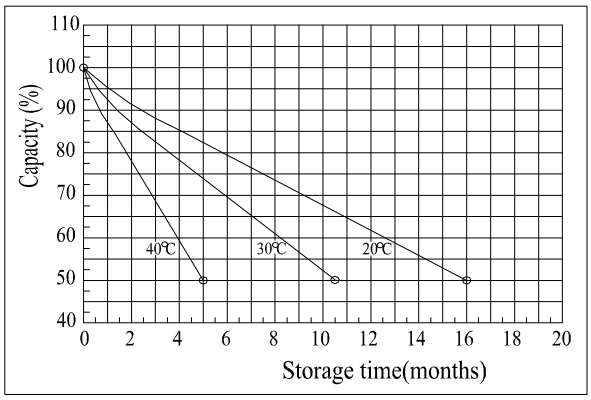
Charging Characteristics(25℃)



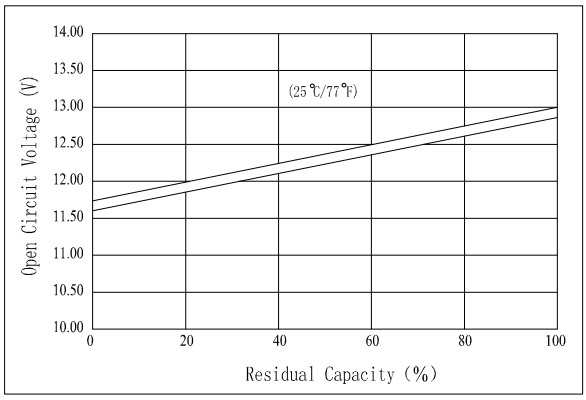
Effect of Temperature on Capacity



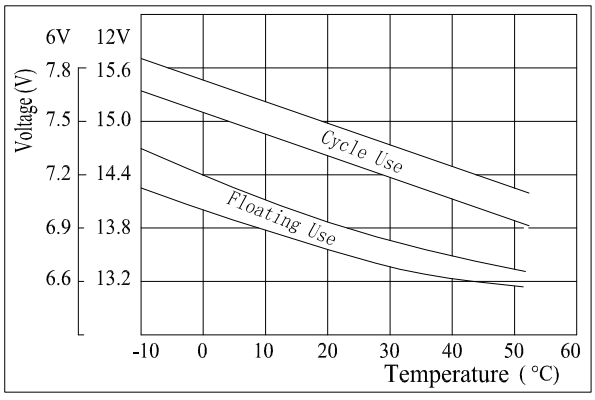
Self-discharge Characteristics



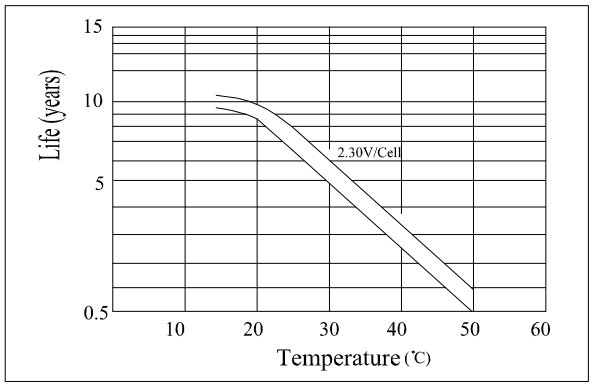
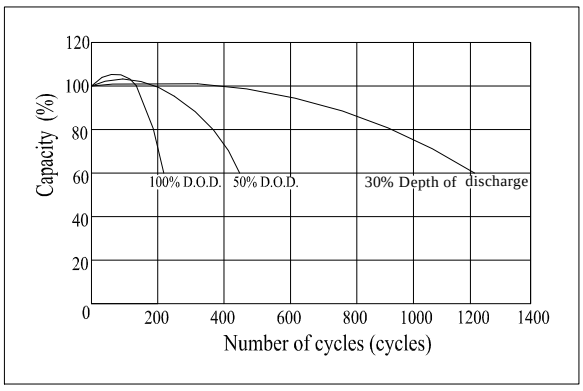
The Relationship for Open Circuit Voltage and Residual Capacity (25℃)



The Relationship for Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25℃)