

# LFP1238(12V38Ah)

## Specifications

Nominal Voltage		12 V
Capacity (25°C)	10HR(10.8V)	38 Ah
	5HR(10.5V)	33.2Ah
	1HR(9.60V)	23.6Ah
Dimension	Length	197 ± 2mm (7.76inch)
	Width	165 ± 2mm (6.50inch)
	Height	170 ± 2mm (6.69inch)
	Total Height	170 ± 2mm (6.69inch)
Approx. Weight		12.0kg (26.4lbs) ± 4%
Terminal type		T4/T9
Internal resistance (Fully charged, 25°C)		Approx. 9m Ω
Capacity affected by temperature (10HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 month	Remaining Capacity: 91%
	6 month	Remaining Capacity: 82%
	12 month	Remaining Capacity: 65%
Nominal operating temperature		25°C ± 3°C (77°F ± 5°F)
Operating temperature range	Discharge	-15°C ~ 50°C (5°F ~ 122°F)
	Charge	-10°C ~ 50°C (14°F ~ 122°F)
	Storage	-20°C ~ 50°C (-4°F ~ 122°F)
Float charging voltage(25°C)		13.50 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 14.90V Temperature compensation: -30mV/°C
Maximum charging current		11.4A
Terminal material		Copper
Maximum discharge current		380A(5 sec.)
Designed floating life(20°C)		12 years

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

## Constant Current Discharge Characteristics (A, 25°C)

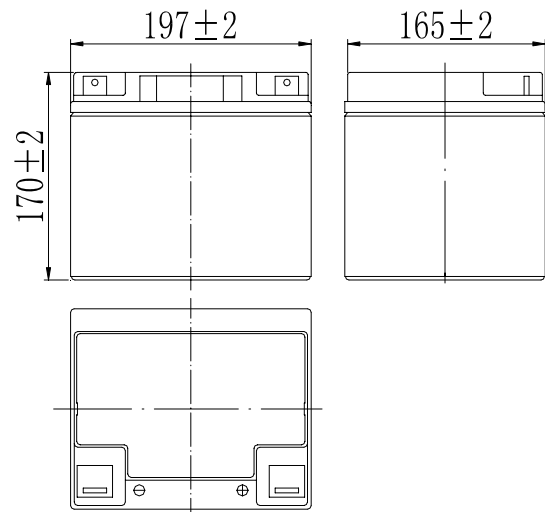
F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	79.8	62.7	38.0	23.6	13.9	9.69	7.95	6.78	4.65	3.87	2.03
9.90V	77.4	61.2	37.2	23.2	13.8	9.63	7.90	6.74	4.62	3.86	2.03
10.2V	74.2	58.9	36.1	22.6	13.7	9.57	7.84	6.70	4.59	3.85	2.02
10.5V	71.0	56.9	35.2	22.2	13.5	9.50	7.79	6.65	4.56	3.83	2.01
10.8V	67.0	53.9	33.9	21.5	13.1	9.22	7.56	6.45	4.42	3.80	2.00

## Constant Power Discharge Characteristics (Watt, 25°C)

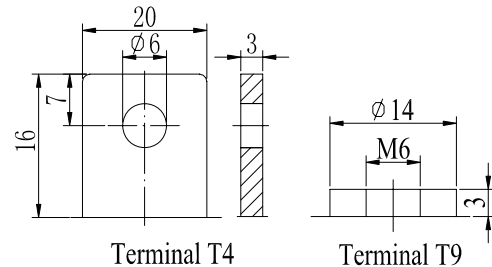
F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	862	688	426	269	161	114	93.4	80.2	55.3	46.2	24.4
9.90V	836	672	418	265	160	113	92.9	79.7	54.9	46.1	24.3
10.2V	802	647	405	258	158	113	92.3	79.2	54.6	46.0	24.3
10.5V	767	625	395	253	156	112	91.6	78.6	54.2	45.7	24.1
10.8V	724	592	381	245	152	108	88.9	76.2	52.5	45.4	23.9

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

## Dimensions

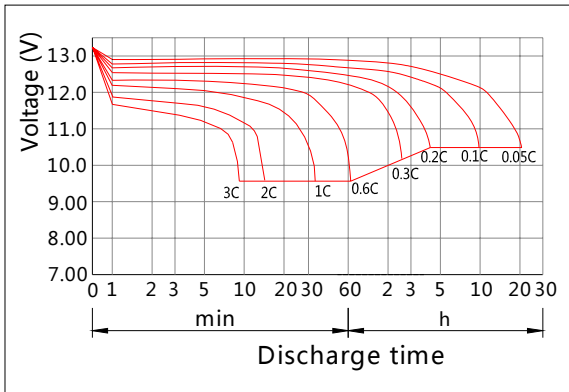


## Terminal

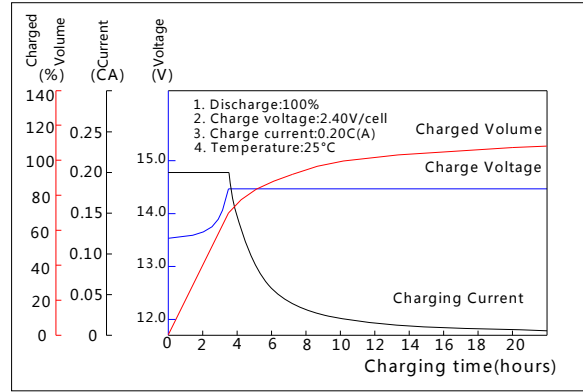


# LFP1238(12V38Ah)

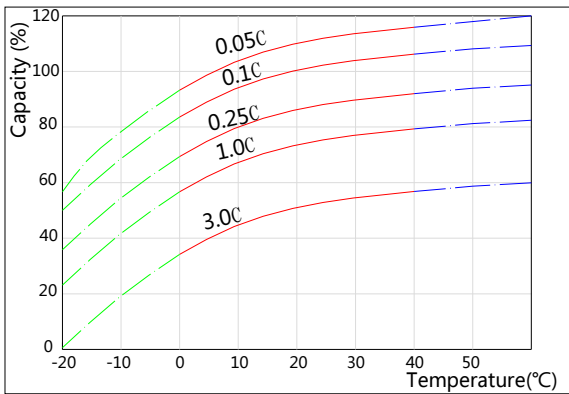
## Discharge Characteristics(25°C)



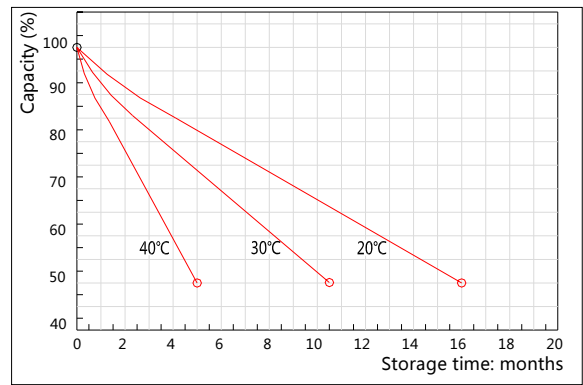
## Charging Characteristics(25°C)



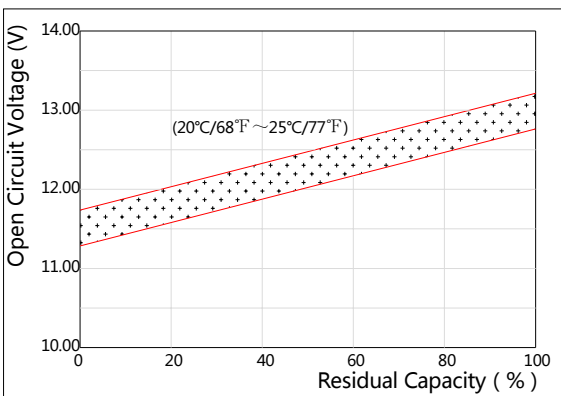
## Effect of Temperature on Capacity



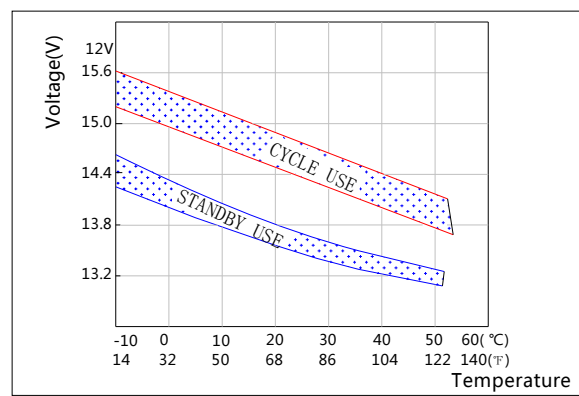
## Self-discharge Characteristics



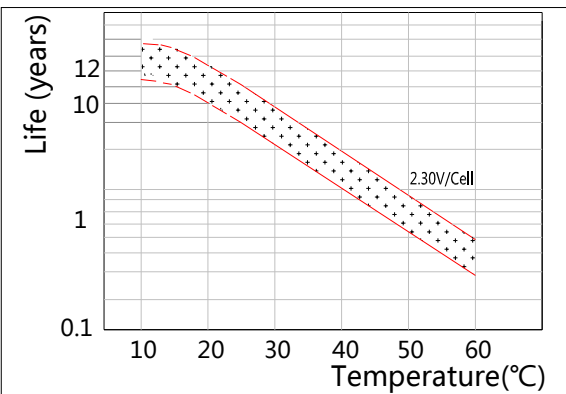
## The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



## The Relationship for Charging Voltage and Temperature



## Floating Life on Temperature



## Cycle Life on D.O.D(25°C)

