Fast Charge Deep Cycle Lead Carbon Battery Carbon12-30

GENERAL FEATURES

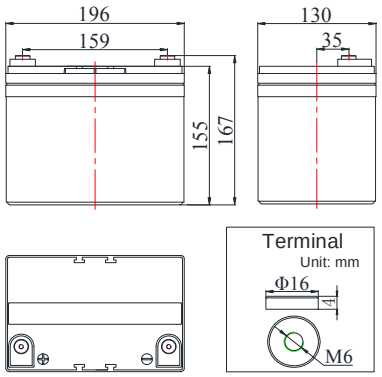
- Combine the characteristics of lead acid battery and super capacitor
- Long life cycle service design, excellent PSoC and cyclic performance
- High power, rapid charging and discharging
- Unique grid and lead pasting design
- Extreme temperature tolerance

APPLICATIONS

- Energy storage system
- Smart power grids and micro grids system
- Hybrid energy storage system
- New energy such as Generator and battery hybrid energy system

DIMENSIONS & WEIGHT

Length(mm)	196±1
Width(mm)	130±1
Height(mm)	155±1
Total Height(mm)	167±1
Weight(kg)	10.2±3%



TECHNICAL SPECIFICATIONS

Nominal Voltage		12V(6 cells per unit)
Design Floating Life @25℃		20 Years
Nominal Capacity @25℃(20 hour rate@1.50A,10.50V)		30.0Ah
Capacity @25℃	10 hour rate (2.78A,10.8V)	27.8Ah
	5 hour rate (5.20A,10.5V)	26.0Ah
	1 hour rate (18.0A,9.60V)	18.0Ah
Internal Resistance	Full Charged Battery@25℃	≤11.0mΩ
Ambient Temperature	Discharge	-30℃~60℃
	Charge	-30℃~60℃
	Storage	-30℃~60℃
Max. Discharge Current@25℃		300A(5s)
Capacity affected by Temperature (10 hr Capacity)	40℃	108%
	25℃	100%
	0℃	90%
	-15℃	70%
Self-Discharge@25℃ per Month		3%
Charge (Constant Voltage) @25℃	Standby Use	Initial Charging Current Less than 9.0A Voltage 13.6-13.8V
	Cycle Use	Initial Charging Current Less than 9.0A Voltage 14.4-14.7V

COMPLIED STANDARDS

IEC 60896-21/22	JIS C8704
YD/T799	BS6290 part4
GB/T 19638	UL 1989

BATTERY DISCHARGE TABLE

Discharge Constant Current per Cell (Amperes at 25°C)

F.V/Time	5min	10min	15min	20min	25min	30min	35min	40min	45min	60min	90min	2h	3h	4h	5h	6h	7h	8h	10h	12h	20h
1.60V	81.6	52.0	44.2	36.0	31.7	28.3	24.9	22.7	20.7	18.0	14.6	11.5	8.1	6.6	5.5	4.6	4.0	3.6	3.06	2.57	1.59
1.65V	80.1	51.1	43.4	35.4	31.2	27.7	24.5	22.2	20.4	17.7	14.3	11.2	7.9	6.5	5.4	4.5	4.0	3.5	3.00	2.52	1.56
1.67V	79.3	50.6	42.9	34.8	30.9	27.5	24.3	22.1	20.3	17.5	14.2	11.1	7.8	6.4	5.3	4.4	3.9	3.5	2.97	2.51	1.55
1.70V	77.7	49.6	42.1	34.2	30.3	27.0	23.9	21.8	19.9	17.2	13.9	11.0	7.8	6.3	5.3	4.4	3.9	3.5	2.91	2.46	1.53
1.75V	77.1	49.1	41.8	33.8	29.9	26.7	23.6	21.5	19.6	17.0	13.8	10.8	7.6	6.2	5.2	4.3	3.8	3.4	2.88	2.42	1.50
1.80V	74.7	47.6	40.3	33.0	29.0	25.9	22.9	20.8	19.1	16.5	13.3	10.4	7.3	5.9	5.0	4.2	3.7	3.3	2.78	2.34	1.46
1.85V	70.2	44.8	38.0	31.0	27.2	24.3	21.5	19.6	17.9	15.5	12.5	9.8	6.9	5.6	4.7	4.0	3.5	3.1	2.61	2.20	1.32

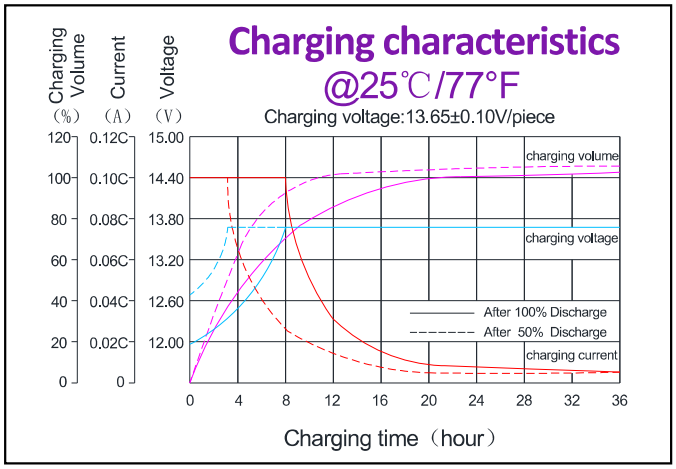
Discharge Constant Power per Cell (Watts at 25°C)

F.V/Time	5min	10min	15min	20min	25min	30min	35min	40min	45min	60min	90min	2h	3h	4h	5h	6h	7h	8h	10h	12h	20h
1.60V	152.9	98.1	83.3	68.2	60.4	54.0	47.7	43.4	39.8	34.6	27.9	22.0	15.5	12.6	10.5	8.8	7.7	6.9	5.8	5.0	3.09
1.65V	150.7	96.6	82.3	67.4	59.5	53.2	46.8	42.6	39.2	34.0	27.4	21.6	15.2	12.4	10.3	8.6	7.6	6.8	5.8	4.9	3.06
1.67V	149.6	95.8	81.5	66.7	59.1	52.7	46.6	42.4	38.9	33.7	27.2	21.4	15.1	12.3	10.2	8.6	7.6	6.8	5.7	4.8	3.05
1.70V	148.2	94.4	80.2	65.4	58.0	51.7	45.9	41.7	38.4	33.0	26.7	21.2	14.9	12.2	10.1	8.5	7.5	6.7	5.6	4.7	3.03
1.75V	147.4	93.6	79.7	64.6	57.2	51.2	45.3	41.3	37.7	32.7	26.4	20.8	14.6	12.0	9.9	8.4	7.4	6.6	5.5	4.7	2.97
1.80V	143.1	91.0	77.3	63.4	55.7	49.6	44.0	40.1	36.6	31.7	25.6	20.0	14.1	11.4	9.6	8.1	7.0	6.3	5.4	4.5	2.88
1.85V	134.9	86.5	73.3	60.0	52.7	47.1	41.7	38.0	34.8	30.1	24.3	19.1	13.4	10.9	9.1	7.7	6.8	6.0	5.1	4.3	2.62

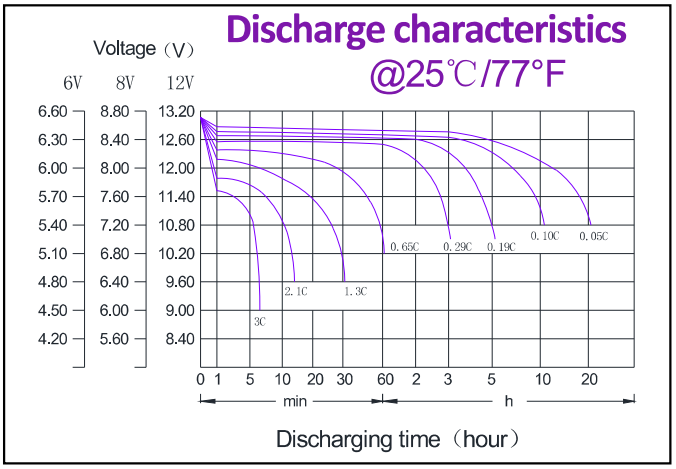
Note The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Contact **VITO** for the latest information.

PERFORMANCE CHARACTERISTICS

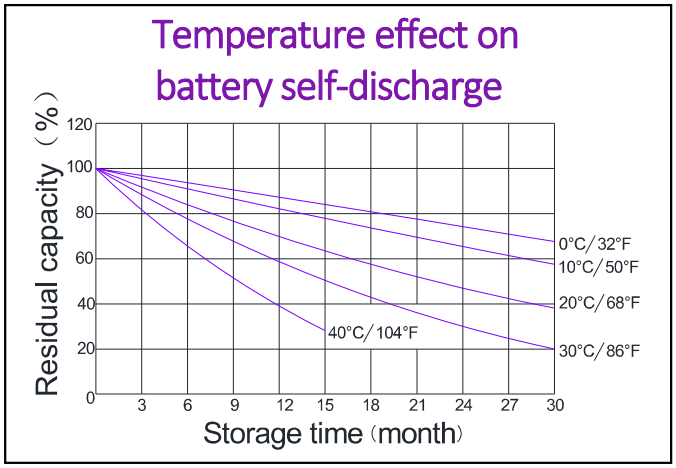
Charging characteristics @25℃/77°F



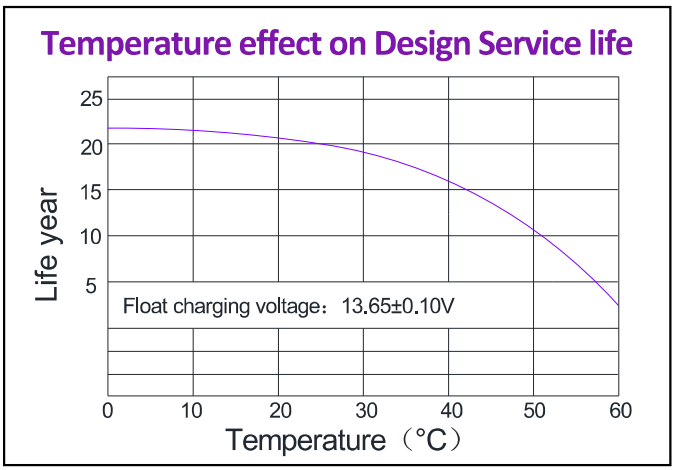
Discharge characteristics @25℃/77°F



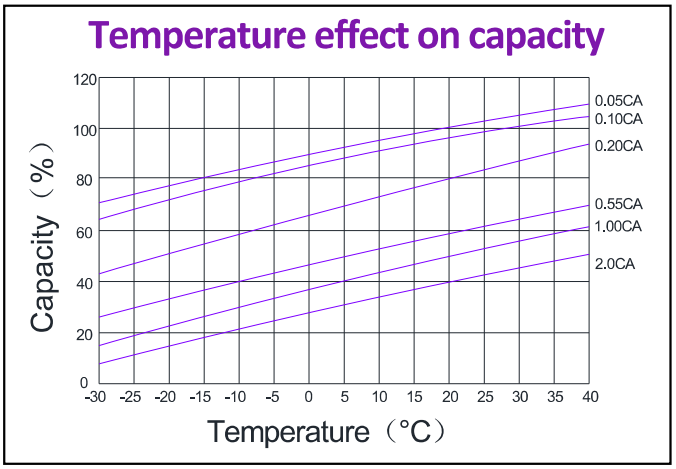
Temperature effect on battery self-discharge



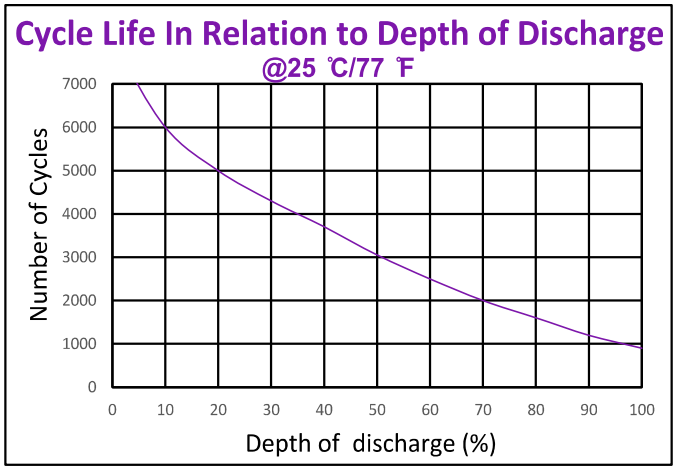
Temperature effect on Design Service life



Temperature effect on capacity



Cycle Life In Relation to Depth of Discharge @25 ℃/77 ℉



BATTERY CONSTRUCTION

Component	Positive plate	Negative plate	Container &Cover	Safety valve	Terminal	Separator	Electrolyte	Pillar seal
Features	Rare earth alloy grid with good corrosion resistance	Unique anode formula, high purity material, low self - discharge rate	Fire resistance ABS	Flame resistance, aging resistance	**Female Copper Insert M5**	**Separator with organic fiber, very long service life**	Gradual change gel electrolyte (with patent)	Anti-corrosion elastic O ring , two layers epoxy seal technology

Vito Trade LTD.
Bulgaria, 6300 Haskovo city, №4 Plovdivsko schose street,
Phone +359877997479

www.vitolux.com