

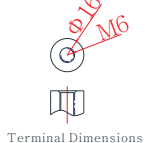
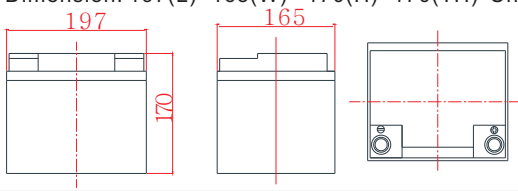


General Features

- High corrosion resistant performance: Pb-Ca multi-alloy grid
- High energy density and power density
- Optimized capability of instant high-current discharging
- Excellent charge acceptance ability
- Strong high and low temperature performance
- Precision sealing technology



Dimension: 197(L)×165(W)×170(H)×170(TH) Unit: mm



Applications

- EPS/Power systems
- Power tools
- Security system/Fire alarm
- Factory automation equipment
- Emergency lighting/Auto control system
- Portable electric device
- Other general purpose

Specification

Nominal Voltage	12V
Nominal Capacity	40Ah
Design life	10 years
Terminal	M6
Approx. Weight	Approx 13.2kg (29.1lbs)
Container Material	ABS
Rated Capacity	40.0Ah 10Hour Rate (4.00A to 10.8V)
	32.1Ah 3Hour Rate (10.7A to 10.8V)
	26.2Ah 1Hour Rate (26.2A to 10.5V)
Internal resistance	Full charged at 25°C: 12.2 mΩ
Max. Discharge Current	480A(5S)
Operating Temperature	Discharge: -40 ~60°C(-40~ 140°F)
	Charge: -20 ~50°C(-4~ 122°F)
	Storage: -20 ~50°C(-4~ 122°F)
Charge current:	Max. 10.0A ; Recom.4.00A
Charge Method (25 °C)	Float Charge:13.5-13.8V,recom.13.5V(-18mV/ °C)
	Equalize charge:13.8-14.1V,recom.14.1V(-24mV/ °C)
	Cycle charge:14.4-15.0V,recom.14.4V(-30mV/ °C)
Self discharge	3% of capacity declined per month at 25°C

Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

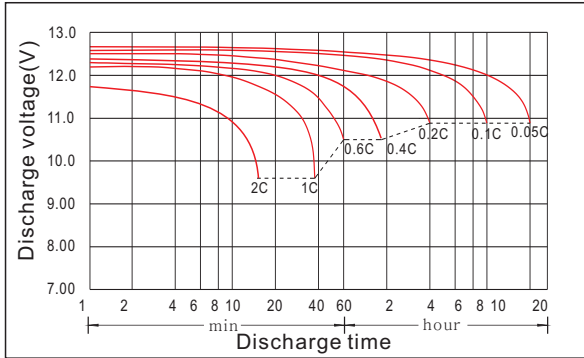
FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	141	75.7	46.1	26.9	15.4	11.2	7.53	4.94	4.16	2.18
1.65V	137	73.4	45.3	26.8	15.4	11.1	7.45	4.90	4.12	2.17
1.70V	131	71.9	44.5	26.6	15.2	10.9	7.37	4.86	4.08	2.16
1.75V	121	69.5	44.1	26.2	15.0	10.8	7.29	4.82	4.04	2.15
1.80V	108	64.8	42.2	25.5	14.7	10.7	7.10	4.78	4.00	2.14
1.85V	96.4	57.8	38.5	23.6	14.0	10.1	6.74	4.58	3.88	2.10

Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

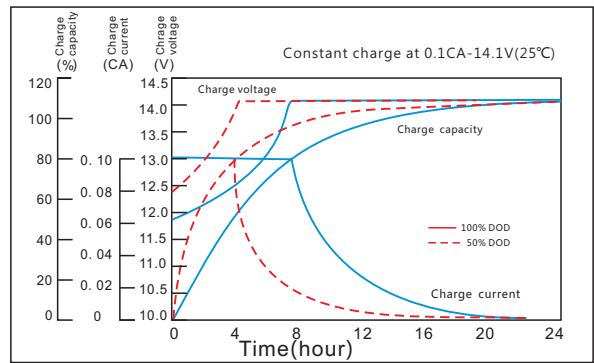
FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	236	133	83.3	50.9	29.2	21.3	14.3	9.60	8.00	4.32
1.65V	227	131	82.6	50.5	29.1	21.1	14.2	9.52	7.92	4.30
1.70V	226	129	82.6	50.1	29.0	20.9	14.1	9.48	7.84	4.28
1.75V	211	129	82.2	49.7	28.9	20.8	14.0	9.41	7.76	4.26
1.80V	194	122	80.2	49.4	28.8	20.7	13.8	9.33	7.68	4.24
1.85V	173	109	73.5	45.8	27.5	19.7	13.2	9.01	7.56	4.20

NP12400

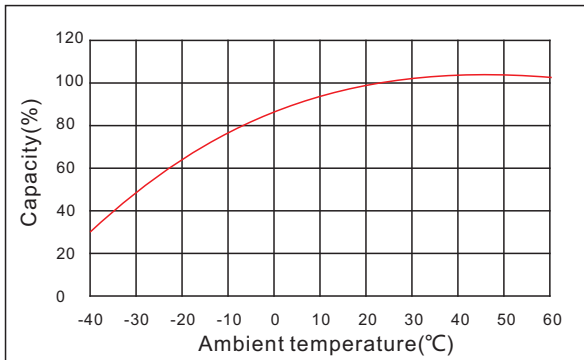
Discharge characteristic



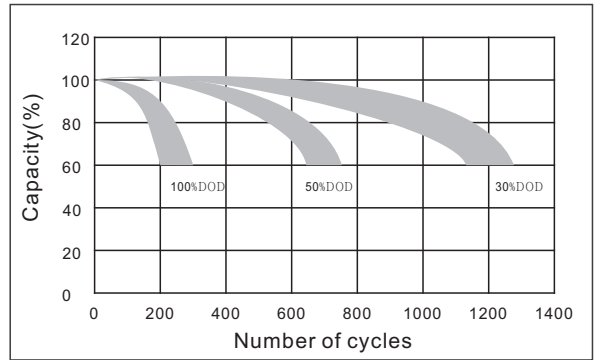
Charging characteristic



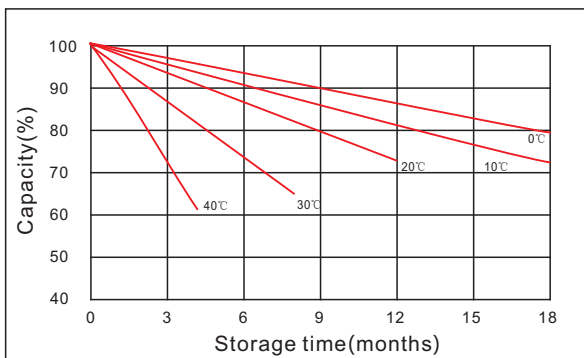
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

