



Application:

- For standard 19 inch or 23 inch power cabinets
- Network connection equipment of communication system
- Power system of special network or local area network
- UPS, standby power supply
- Power station systems
- Marine systems

Specifications

Battery Model	12V50FT
Nominal Voltage	12V
Rated Capacity	50Ah (10 hour rate) to 1.80V/cell @25°C(77°F)
Typical Weight	21.3kg
Internal Resistance	Approx 8.94mΩ
Temperature Ranges	Operation (maximum): -40°C to 50°C(-40°F to 122°F)
	Operation (recommended): 15°C to 25°C(59°F to 77°F)
	Storage: -20°C to 40°C(-4°F to 104°F)
Float Voltage	2.25V/cell@25°C(77°F)
Recommended Maximum Charging Current Limit	12.5A
Equalize and Cycle Service	2.35V~2.40V/cell@25°C(77°F)
Self Discharge	The residual capacity is above 90% after 90 days storage(25°C/77°F)
Terminal	M6 Female
Terminal Hardware Torque	8 ± 1. 0Nm
Container Material	ABS (V0 optional)

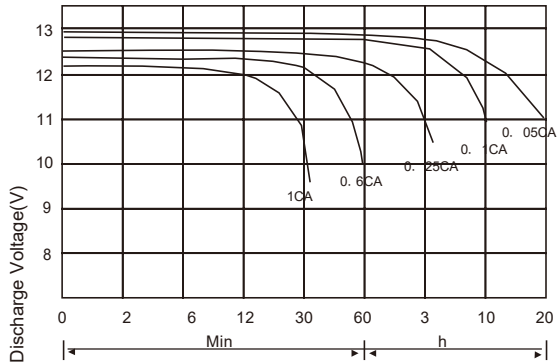
Constant Current Discharge Characteristics Units: Amperes (25°C, 77°F)

End voltage	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	187.0	100.5	61.1	44.2	35.7	20.5	14.9	11.7	9.86	8.46	6.49	5.30	4.53	2.84	2.37
1.67V	175.6	96.9	60.1	43.8	35.5	20.4	14.6	11.6	9.81	8.41	6.44	5.25	4.52	2.81	2.35
1.70V	174.0	95.3	59.0	43.5	35.3	20.2	14.5	11.6	9.65	8.30	6.44	5.25	4.47	2.81	2.35
1.75V	160.0	92.2	58.5	43.2	34.7	19.7	14.4	11.4	9.60	8.25	6.38	5.20	4.47	2.80	2.35
1.80V	143.5	86.0	55.9	41.4	33.9	19.5	14.3	11.4	9.39	8.10	6.33	5.14	4.44	2.77	2.34
1.83V	136.7	78.7	54.9	40.0	32.4	19.3	13.8	10.8	9.08	7.84	6.18	4.95	4.22	2.76	2.31
1.85V	127.9	76.7	51.1	38.5	31.4	18.6	13.4	10.7	8.87	7.63	5.97	4.91	4.17	2.71	2.28

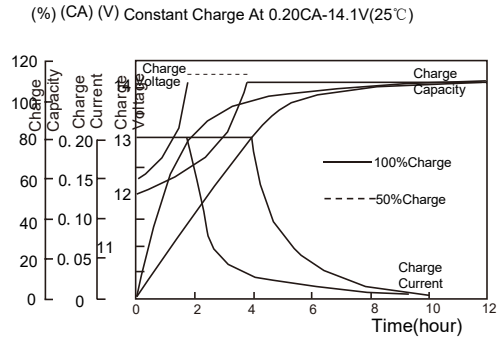
Discharge Data with Constant Power Units: Watts per cell (25°C, 77°F)

End voltage	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	313.5	177.0	110.5	83.0	67.5	38.6	28.2	22.3	18.8	16.2	12.6	10.3	8.69	5.58	4.66
1.67V	301.5	173.9	109.5	82.5	67.0	38.5	27.8	22.3	18.8	16.1	12.5	10.2	8.69	5.53	4.66
1.70V	300.0	171.8	109.5	82.5	67.0	38.3	27.8	22.2	18.6	16.0	12.4	10.1	8.63	5.53	4.65
1.75V	279.7	170.7	109.0	82.0	66.0	38.1	27.5	22.2	18.6	16.0	12.3	10.1	8.58	5.53	4.65
1.80V	256.9	161.4	106.4	80.4	65.5	38.0	27.5	22.1	18.2	15.8	12.3	10.1	8.58	5.53	4.64
1.83V	245.5	147.9	105.3	77.8	62.9	37.5	26.8	21.3	17.8	15.4	12.1	9.90	8.32	5.53	4.61
1.85V	229.4	144.3	97.6	74.7	60.8	36.3	26.1	21.0	17.4	15.0	11.8	9.80	8.22	5.43	4.58

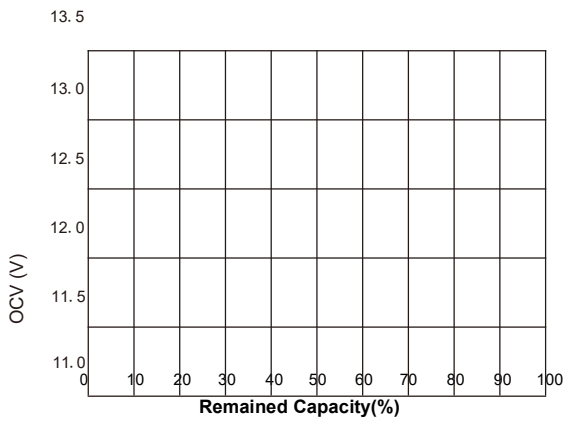
Terminal Voltage(V) Vs. Discharge Time (25°C, 77°F)



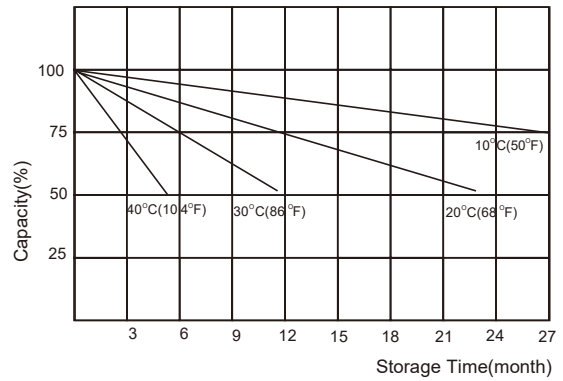
Battery Voltage Vs. Charge Time



Relationship of OCV Vs. State of Charge



Capacity Retention Characteristic



Charging Procedures

Application	Charge Voltage (V/Cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle	25°C	2.40	2.35~2.40	0.25C
Standby	25°C	2.25	2.23~2.27	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.80	1.70	1.55	1.30
Discharge Current (A)	0.2C ≥ (A)	0.2C < (A) < 0.5C	0.5C < (A) < 1.0C	(A) > 1.0C

