



**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	12V85F
Nominal Voltage	12V
Rated Capacity	85Ah (10 hour rate) to 1.80V/cell @25°C(77°F)
Typical Weight	31.5kg
Internal Resistance	Approx 6.52mΩ
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	21.25A
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)

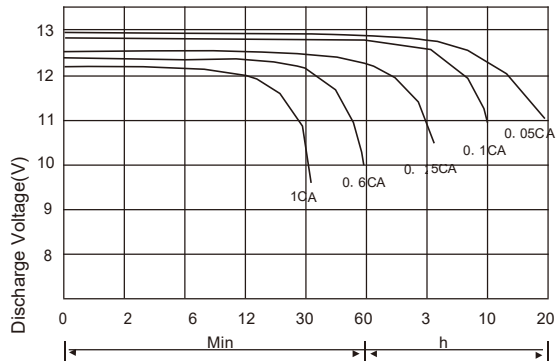
**Constant Current Discharge Characteristics Units: Amperes (25°C, 77°F)**

End voltage	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	305.6	164.2	99.9	72.2	58.4	33.5	24.3	19.1	16.1	13.8	10.6	8.75	7.40	4.64	3.87
1.67V	287.0	158.3	98.2	71.6	58.1	33.3	23.9	19.0	16.0	13.7	10.5	8.66	7.39	4.60	3.84
1.70V	284.5	155.8	96.5	71.1	57.6	33.1	23.7	18.9	15.8	13.6	10.5	8.66	7.31	4.59	3.84
1.75V	261.6	150.7	95.7	70.6	56.8	32.2	23.5	18.6	15.7	13.5	10.4	8.58	7.31	4.58	3.84
1.80V	234.5	140.5	91.4	67.7	55.3	31.9	23.3	18.6	15.4	13.2	10.3	8.49	7.26	4.53	3.83
1.83V	223.5	128.7	89.7	65.4	52.9	31.5	22.5	17.7	14.8	12.8	10.1	8.18	6.90	4.52	3.77
1.85V	209.1	125.3	83.5	62.9	51.3	30.3	21.9	17.5	14.5	12.5	9.80	8.11	6.82	4.43	3.73

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

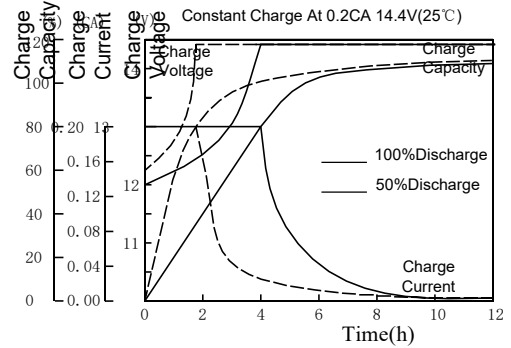
End voltage per cell	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	511.9	286.4	178.9	134.4	109.3	63.2	46.2	36.6	30.8	26.6	20.6	16.9	14.2	9.15	7.64
1.67V	492.4	281.3	177.2	133.5	108.4	63.1	45.6	36.5	30.8	26.4	20.5	16.8	14.2	9.07	7.64
1.70V	489.8	278.0	177.2	133.5	108.4	62.8	45.6	36.4	30.4	26.3	20.3	16.6	14.2	9.07	7.63
1.75V	459.8	276.3	176.4	132.7	106.8	62.5	45.1	36.4	30.4	26.2	20.2	16.6	14.1	9.07	7.63
1.80V	420.5	261.2	172.2	130.2	105.9	62.3	45.0	36.3	29.9	25.9	20.1	16.6	14.1	9.07	7.61
1.83V	409.6	239.3	170.5	126.0	101.7	61.5	43.9	34.9	29.2	25.2	19.9	16.2	13.6	9.07	7.56
1.85V	384.3	233.5	157.9	120.9	98.4	59.5	42.7	34.5	28.6	24.7	19.3	16.0	13.5	8.90	7.50

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

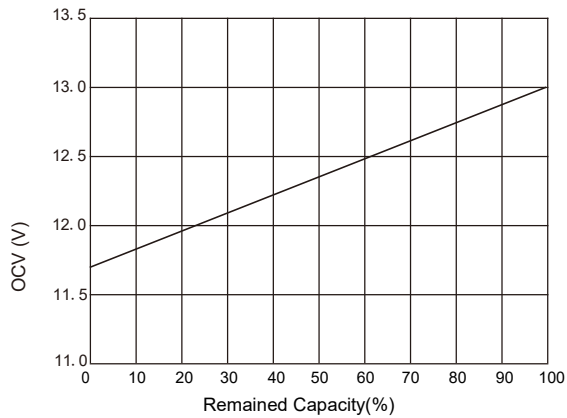


**Battery Voltage Vs. Charge Time**

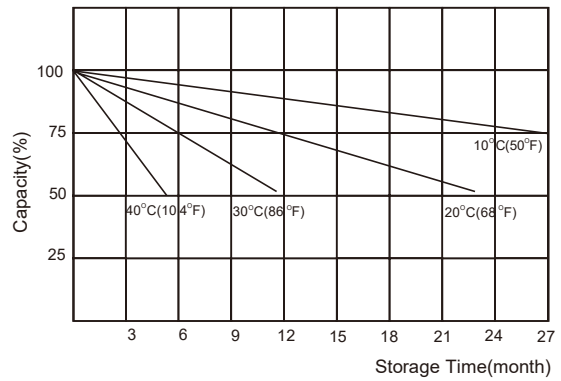
**Charge Characteristic**



**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

