



GEL BATTERY

MAIN NEW ENERGY CO.,LTD

Front Terminal Series

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	12V125G
Nominal Voltage	12V
Rated Capacity	125Ah (10 hour rate) to 1.80V/cell
Typical Weight	48kg
Internal Resistance	Approx 4.9mΩ
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	31.25A
Equalize and Cycle Service	2.35V~2.40V/cell@25°C (77°F)
Self Discharge	The residual capacity is above 90% after 90 days
Terminal	M6 Female
Terminal Hardware Torque	10± 1.0Nm
Dimensions	558*125*270mm

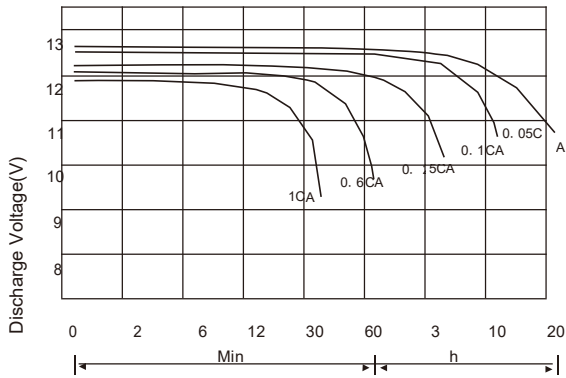
Constant Current Discharge Characteristics Units: Amperes (25°C, 77°F)

End voltage per cell	5min	15min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	408	219	133	96	77.8	44.7	34.9	26.8	24.1	20.2	15.8	13.1	10.94	6.83	5.70
1.67V	384	212	131	96	77.4	44.4	34.3	26.7	23.9	20.2	15.6	13.0	10.84	6.77	5.65
1.70V	380	208	129	95	76.8	44.1	34.1	26.5	23.6	20.2	15.6	12.8	10.74	6.75	5.65
1.75V	349	202	128	94	75.7	43.0	33.7	26.2	23.3	20.0	15.4	12.7	10.74	6.74	5.64
1.80V	313	188	123	91	73.7	42.6	33.5	26.2	22.7	19.6	15.3	12.6	10.64	6.67	5.63
1.83V	299	172	120	88	70.5	42.1	32.4	24.9	22.0	18.9	14.9	12.0	10.24	6.66	5.54
1.85V	280	167	112	84	68.4	40.5	31.5	24.6	21.5	18.5	14.5	11.9	10.14	6.53	5.49

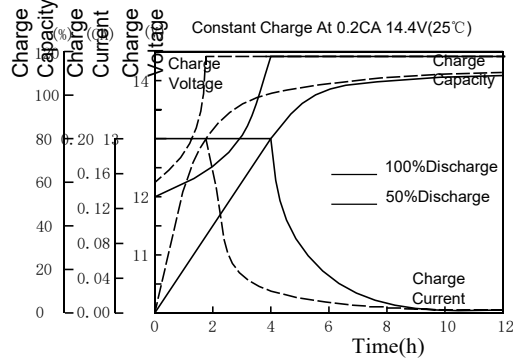
Discharge Data with Constant Power Units: Watts per cell (25°C, 77°F)

End voltage per cell	5min	15min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	683	386	240	181	146.6	84.2	66.5	51.5	46.2	38.9	30.5	25.3	21.28	13.55	11.35
1.67V	658	379	238	180	145.6	84.0	65.6	51.4	46.0	39.0	30.1	25.2	21.08	13.45	11.35
1.70V	654	375	238	180	145.6	83.7	65.6	51.2	45.6	38.9	30.1	24.7	20.88	13.45	11.35
1.75V	611	372	237	179	142.6	83.2	65.0	51.1	45.3	38.8	29.8	24.6	20.88	13.35	11.35
1.80V	570	351	232	175	142.6	83.0	64.8	51.0	44.3	38.4	29.8	24.5	20.78	13.45	11.24
1.83V	549	322	229	170	136.5	81.9	63.3	49.2	43.3	37.2	29.5	23.9	20.38	13.35	11.24
1.85V	521	315	213	163	132.5	79.3	61.5	48.5	42.3	36.5	28.6	23.7	20.28	13.15	11.14

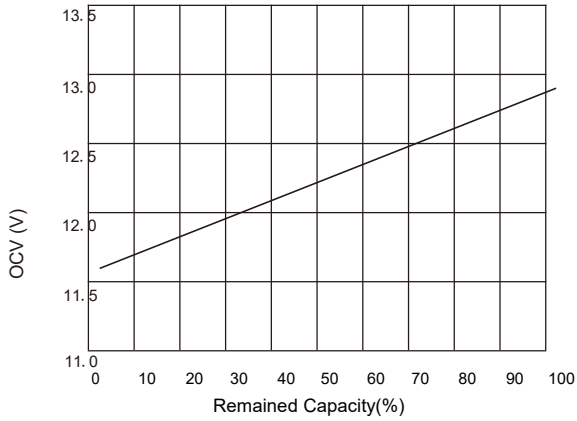
Terminal Voltage(V) Vs. Discharge Time (25°C, 77°F)



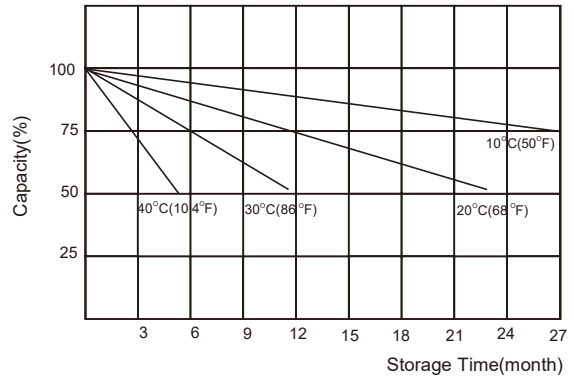
Battery Voltage Vs. Charge Time Charge Characteristic



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

