



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	12V150G
Nominal Voltage	12V
Rated Capacity	150Ah (10 hour rate) to 1.80V/cell
Typical Weight	52kg
Internal Resistance	Approx 3.9mΩ
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	37.5A
Equalize and Cycle Service	2.35V~2.40V/cell@25°C (77°F)
Self Discharge	The residual capacity is above 90% after 90 days
Terminal	M6 Female
Terminal Hardware Torque	10± 1.0Nm
Dimensions	558*125*310mm

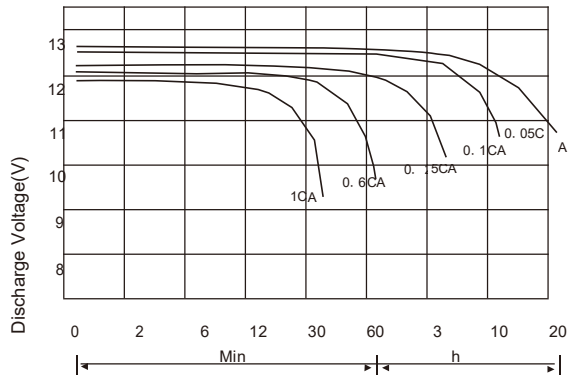
Constant Current Discharge Characteristics Units: Amperes (25°C, 77°F)

End voltage per cell	5min	15min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	586.8	314.2	190.6	138	111.2	63.7	45.9	36	30.2	26	19.9	16.28	13.67	8.59	7.17
1.67V	551.7	302.8	187.5	137	111.2	63.2	45.1	35.8	30.1	25.8	19.7	15.98	13.67	8.52	7.11
1.70V	546.5	297.7	184.4	136	110.2	62.7	44.9	35.6	29.6	25.6	19.6	15.98	13.57	8.5	7.11
1.75V	502	288.4	182.3	134.9	108.2	61.2	44.3	35.2	29.4	25.4	19.4	15.98	13.57	8.47	7.1
1.80V	450.2	268.8	175.1	129.8	105.1	60.7	44.1	35.1	28.8	24.9	19.3	15.78	13.47	8.39	7.09
1.83V	428.5	246.2	172	124.6	100.9	59.9	42.5	33.6	27.9	24.1	18.8	15.18	12.76	8.37	6.97
1.85V	401.6	239	159.7	120.5	97.9	57.7	41.4	33	27.2	23.4	18.3	15.08	12.66	8.21	6.92

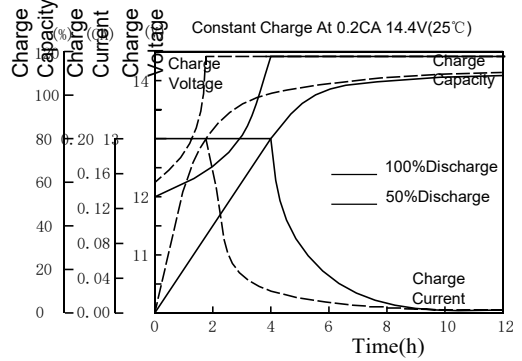
Discharge Data with Constant Power Units: Watts per cell (25°C, 77°F)

End voltage	5min	15min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	976.4	551	342.4	256	207.1	119.3	87.1	68.8	58.1	50	38.7	31.61	26.66	17.07	14.31
1.67V	940.4	540.7	339.3	255	206	119.3	85.9	68.7	58.1	49.7	38.4	31.41	26.66	16.97	14.31
1.70V	934.2	534.6	339.3	254	206	118.3	85.9	68.4	57.2	49.3	38.2	31.21	26.36	16.97	14.21
1.75V	883.7	530.4	338.3	254	203	118.3	85.1	68.4	57.1	49.2	37.7	31.11	26.36	16.97	14.21
1.80V	810.6	501.7	330.1	247.9	202	117.3	84.8	68.2	56.2	48.7	37.7	31.01	26.36	16.97	14.21
1.83V	785.9	459.5	326	240.7	193.8	116.3	82.9	65.7	55	47.3	37.3	30.2	25.55	16.87	14.11
1.85V	744.7	448.2	303.4	230.5	187.7	112.2	80.6	64.9	53.6	46.4	36.2	30	25.25	16.56	14.01

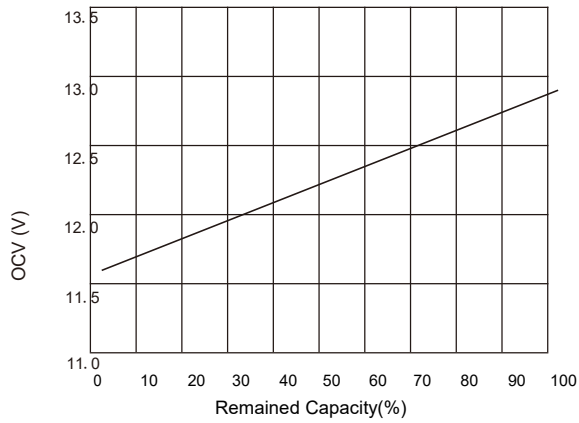
Terminal Voltage(V) Vs. Discharge Time (25°C, 77°F)



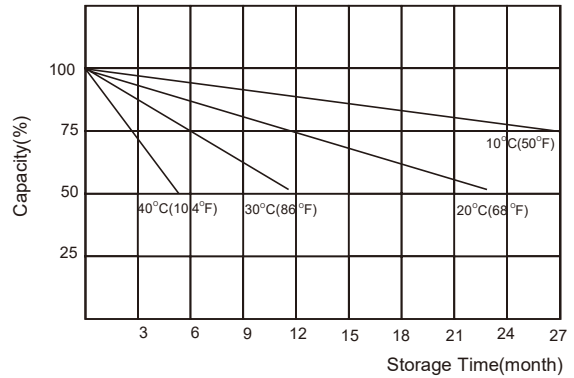
Battery Voltage Vs. Charge Time Charge Characteristic



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



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