

YGD Series

YGD 12-14 (12V 14Ah)

Specifications

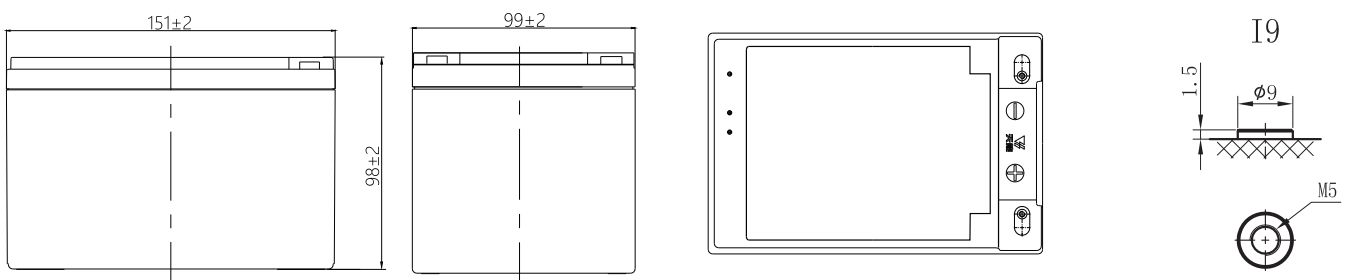
Rated Voltage	12V	
Nominal Capacity	14Ah	1.75(C 10, 1.75V/cell)
Dimension	Length	151±2mm/5.94±0.08inch
	Width	99±2mm/3.9±0.08inch
	Container Height	98±2mm/3.86±0.08inch
	Total Height	98±2mm/3.86±0.08inch
Approx Weight	3,95 kg	
Terminal	I9	
Container Material	ABS UL94-HB	
Rated Capacity (25°C)	15.0Ah	20hr Rate (1.80V/cell)
	14.0Ah	10hr Rate (1.75V/cell)
	13.5Ah	5hr Rate (1.75V/cell)
	12.6Ah	2hr Rate (1.75V/cell)
Operating Temp. Range	Discharge	-15°C~50°C (5°F~122°F)
	Charge	0°C~40°C (32°F~104°F)
	Storage	-15°C~40°C (5°F~104°F)
	Effect of temp. to Capacity	25°C±2°C (77°F±5°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 1.89A. Voltage 14.6V ~ 14.8 V at 25 °C (77°F)Temp. Coefficient -24mV/°C	
	Standby Use Initial Charging Current less than 1.89A. Voltage 13.6V~13.8V at 25°C (77°F)Temp. Coefficient -18mV/°C	
Effect of temp. to Capacity	40° C	106%
	25° C	100%
	0° C	85%
	-15° C	72%
Self Discharge	YGD series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



Applications

- Moped
- Electric Two-wheeler
- Electric Motorcycle
- E-scooter
- Kid's Electric Bike

Layout



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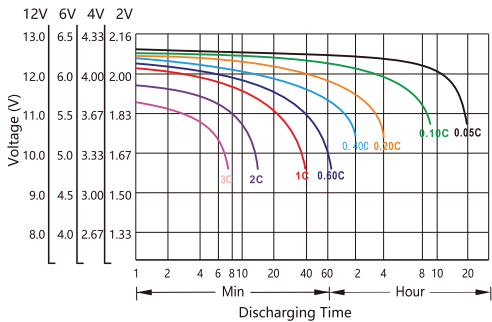
Constant Current Discharge (A)@25°C (77°F)

F.V/Time	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	29.3	24.1	17.7	12.6	10.0	5.71	3.90	3.02	2.50	2.13	1.66	1.36	0.725
1.80V/cell	30.0	24.6	18.3	13.0	10.3	5.91	3.99	3.11	2.60	2.21	1.71	1.39	0.750
1.75V/cell	30.8	25.2	18.8	13.5	10.7	6.28	4.20	3.22	2.70	2.32	1.76	1.4	0.764
1.70V/cell	31.8	25.9	19.3	13.8	11.0	6.39	4.29	3.34	2.79	2.37	1.80	1.46	0.782
1.67V/cell	32.5	26.5	19.7	14.3	11.4	6.45	4.35	3.42	2.87	2.42	1.84	1.48	0.788
1.60V/cell	33.7	27.4	20.2	14.7	11.7	6.66	4.50	3.52	2.91	2.48	1.89	1.53	0.794

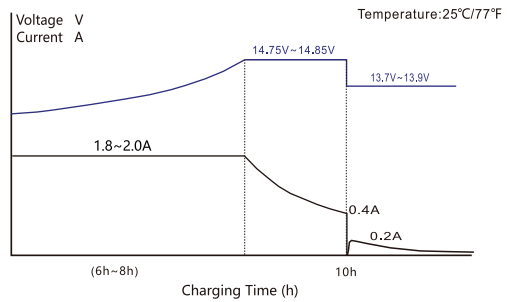
Constant Power Discharge (W/cell)@25°C (77°F)

F.V/Time	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	55.9	46.5	34.5	24.8	19.8	11.4	7.82	6.08	5.05	4.31	3.37	2.75	1.48
1.80V/cell	56.8	47.3	35.6	25.4	20.3	11.7	7.97	6.24	5.23	4.46	3.45	2.81	1.52
1.75V/cell	58.0	48.3	36.5	26.4	21.0	12.4	8.36	6.44	5.50	4.66	3.53	2.82	1.54
1.70V/cell	59.6	49.2	37.2	26.8	21.6	12.6	8.49	6.62	5.55	4.72	3.60	2.91	1.57
1.67V/cell	60.2	49.8	37.7	27.5	22.2	12.6	8.55	6.75	5.68	4.79	3.65	2.94	1.58
1.60V/cell	61.8	51.0	38.4	28.0	22.4	12.9	8.78	6.88	5.71	4.87	3.71	3.02	1.58

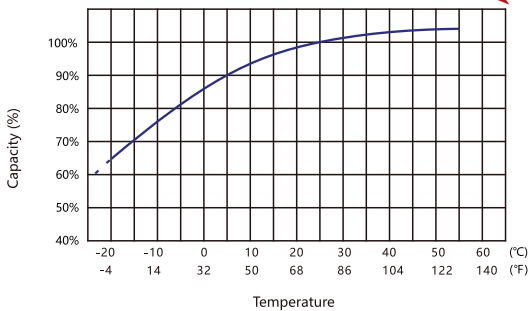
Discharging Characteristics@25°C(77°F)



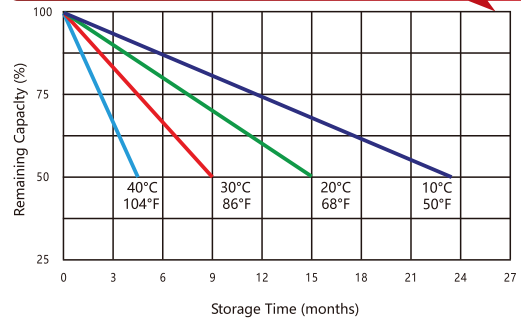
Charging Characteristics@25°C(77°F)



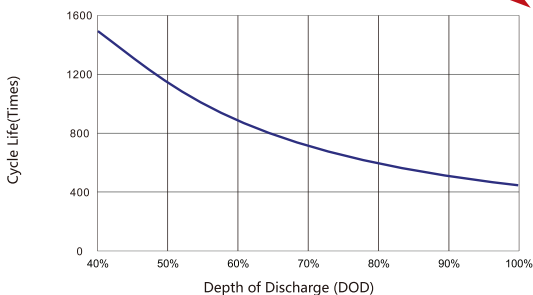
Capacity vs Temperature



Self-discharge vs Time



Cycle Life vs Depth of Discharge@25°C(77°F)



Cycle Life vs Remaining Capacity@25°C(77°F)

