

TNG12-100 [12V100Ah]



Product Features

General Purpose (GEL)		260~300 Cycle Times @100%DOD	
↑20% Cycle Life High temperature curing	↑10% Low Temp. Capacity Nano gel electrolyte	↑20% Charge Acceptance Special negative additive	↓50% Grid Corrosion Rare-earth patent alloy

Product Applications



Physical Specification

Model	Dimensions (mm/inch)				Weight (kg/lbs)	Terminal	Container
TNG12-100	Length	Width	Height	Total Height	30.6/67.5	I7	ABS UL94-HB (Optional: FR ABS UL94-V0)
	330/13.0	172/6.77	214/8.43	221.5/8.72			

Product Specifications

Nominal Voltage	Rated Capacity 25°C/77°F	Internal Resistance	Max. Discharge Current	Operating Temp. Range
12V	106Ah 20hr Rate (1.80V/cell) 100Ah 10hr Rate (1.80V/cell) 87Ah 5hr Rate (1.75V/cell) 79Ah 3hr Rate (1.70V/cell)	4.3mΩ@25°C/77°F	700A (5s)	Discharge: -15~50°C (5~122°F) Charge: -0~40°C (32~104°F) Storage: -15~40°C (5~104°F) Optimum: 25±2°C (77±4°F)

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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	182	144	110	92.2	70.5	54.4	44.8	28.9	22.2	18.2	15.7	13.9	11.4	9.76	5.21
1.80V/cell	202	159	125	105	80.5	60.6	49.8	30.8	23.7	19.3	16.5	14.6	11.9	10.0	5.30
1.75V/cell	218	174	137	116	87.9	65.4	53.5	33.4	25.2	20.5	17.4	15.1	12.3	10.2	5.41
1.70V/cell	229	186	146	124	93.4	68.9	56.0	34.7	26.2	21.1	17.9	15.5	12.5	10.4	5.53
1.67V/cell	247	196	155	131	98.9	71.7	58.3	36.0	26.7	21.6	18.3	15.9	12.7	10.6	5.62
1.60V/cell	273	210	168	143	104	76.3	61.7	37.1	27.9	22.4	18.9	16.3	13.1	10.9	5.73

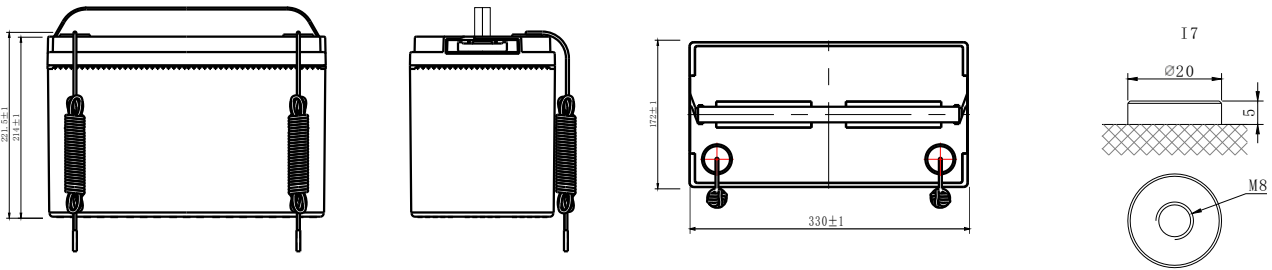
Constant Power Discharge (W/cell)@25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	339	272	211	179	139	108	89.2	58.0	44.9	37.0	32.0	28.5	23.4	20.0	10.7
1.80V/cell	375	300	239	203	158	120	98.9	61.7	47.7	39.0	33.6	29.7	24.4	20.5	10.9
1.75V/cell	404	328	261	223	172	129	106	66.6	50.7	41.4	35.3	30.8	25.1	20.9	11.1
1.70V/cell	424	349	278	238	182	136	111	69.1	52.4	42.5	36.2	31.5	25.5	21.2	11.3
1.67V/cell	456	366	293	251	192	141	115	71.5	53.2	43.2	36.9	32.1	25.8	21.5	11.4
1.60V/cell	501	391	316	273	202	149	121	73.4	55.5	44.8	37.8	32.9	26.4	21.9	11.6

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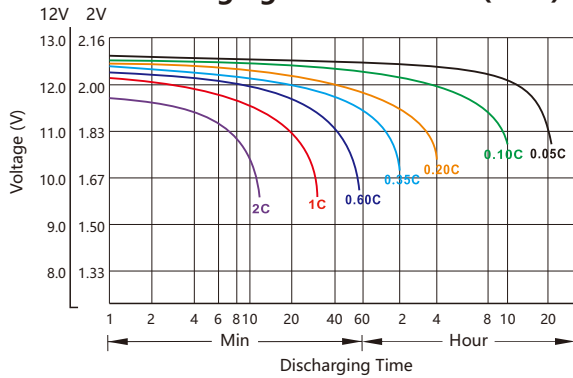


Battery Dimensions(mm)

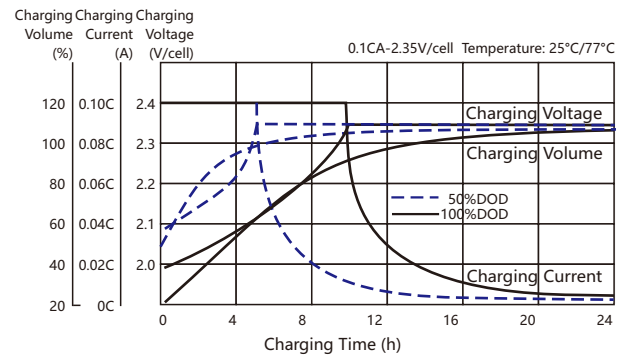


Electrical Characteristics

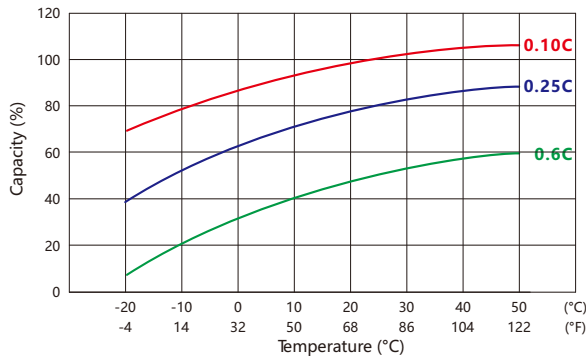
Discharging Characteristics(25°C)



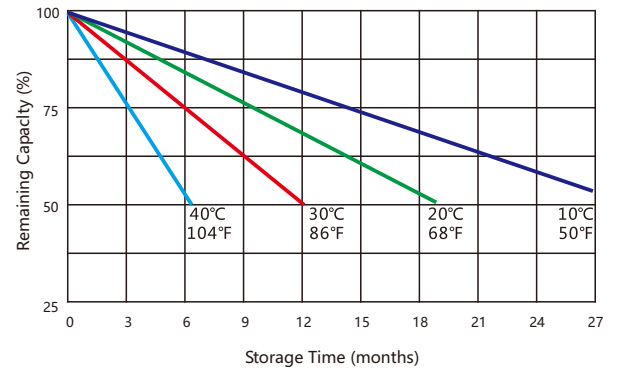
Charging Characteristics(25°C)



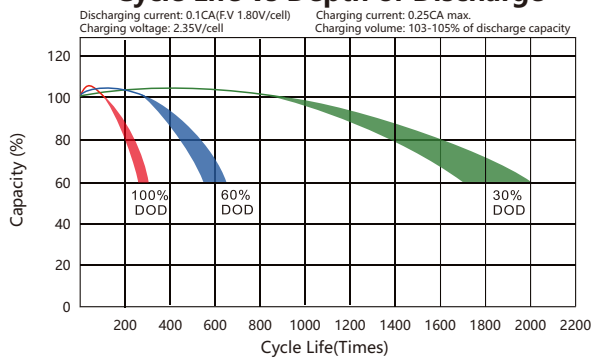
Capacity vs Temperature



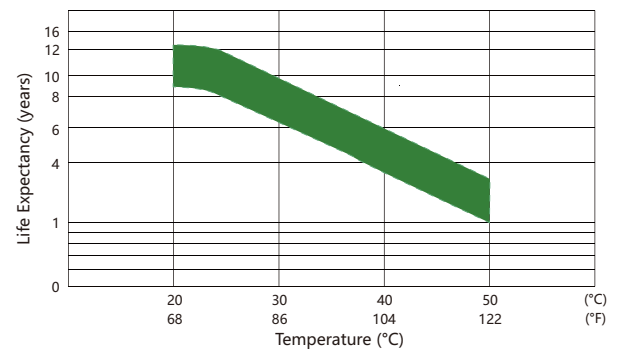
Self-discharge vs Time



Cycle Life vs Depth of Discharge



Floating Life vs Temperature



Usage and Maintenance

Charge Current	Equalization Charge	Float Charge
Limited current: $\leq 0.25C_{10}A$	Constant Voltage: 14.1~14.4V@25°C(77°F) Temp.Coefficient:-24mV/°C	Constant Voltage: 13.5~13.8V@25°C(77°F) Temp.Coefficient:-18mV/°C