

# TN12-150E [12V 150Ah,20hr]

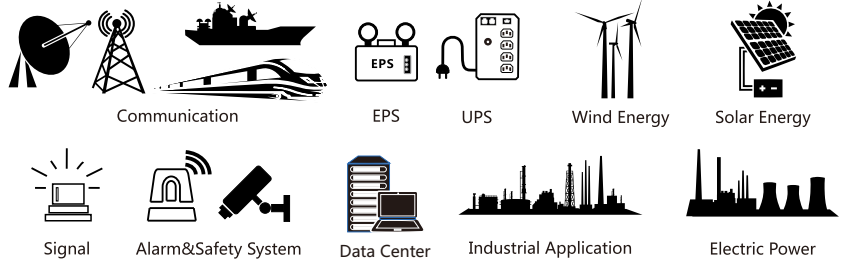


## Product Features

General Purpose (AGM)		6~10 years of design life@25°C	
100%	Model Coverage Both Cycle & Float Application	↑98%	Capacity Retention High Purity Electrolyte
↑20%	Charge Acceptance Special Negative Additive	↓50%	Grid Corrosion Rare-earth patent alloy



## Product Applications



## Physical Specifications

Model	Dimensions (mm/inch)				Weight (kg/lbs)	Terminal	Container
TN12-150E	Length	Width	Height	Total Height	40.2/88.6	I7	ABS UL94-HB (Optional: FR ABS UL94-V0)
	480/18.9	170/6.69	240/9.45	240/9.45			

## Product Specifications

Nominal Voltage	Rated Capacity@25°C/77°F	Internal Resistance	Max. Discharge Current	Operating Temp. Range
12V	150Ah 20hr Rate (1.80V/cell) 143Ah 10hr Rate (1.80V/cell) 125Ah 5hr Rate (1.75V/cell) 113Ah 3hr Rate (1.70V/cell)	3.5mΩ@25°C/77°F	1030A (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	280	222	193	167	127	96.5	80.1	47.8	34.9	27.7	23.4	20.5	16.5	13.9	7.39
1.80V/cell	341	260	217	182	135	103	84.0	49.9	36.3	29.0	24.4	21.3	17.0	14.3	7.50
1.75V/cell	395	285	236	193	143	107	87.2	51.1	37.2	29.5	24.9	21.7	17.3	14.5	7.68
1.70V/cell	438	308	246	200	149	111	90.1	52.0	37.7	30.1	25.3	22.1	17.7	14.8	7.84
1.67V/cell	462	324	256	208	154	114	92.2	53.1	38.3	30.7	25.8	22.4	17.8	15.0	7.97
1.60V/cell	495	344	269	219	162	118	94.3	53.9	39.0	31.1	26.2	22.6	18.0	15.2	8.13

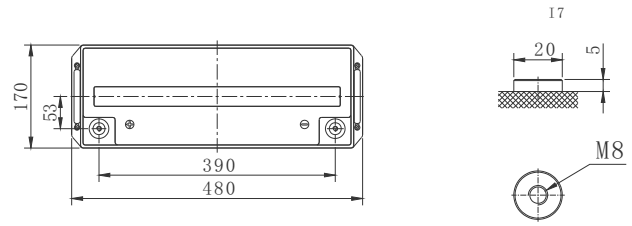
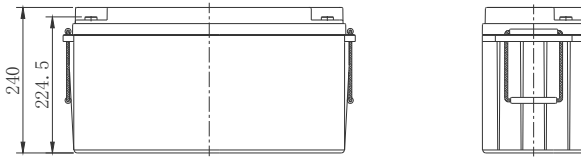
## Constant Power Discharge (W/cell)@25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	521	420	370	324	250	191	159	96.0	70.6	56.3	47.7	41.8	33.8	28.4	15.2
1.80V/cell	633	490	415	352	265	203	167	99.9	73.2	58.7	49.5	43.3	34.8	29.3	15.4
1.75V/cell	732	537	449	372	279	212	173	102	74.6	59.6	50.5	44.2	35.4	29.7	15.7
1.70V/cell	812	577	467	385	291	218	178	103	75.6	60.6	51.2	44.7	35.9	30.1	16.0
1.67V/cell	853	607	484	399	300	224	182	105	76.5	61.6	51.9	45.2	36.1	30.4	16.2
1.60V/cell	910	639	507	417	314	231	185	107	77.6	62.2	52.5	45.6	36.4	30.7	16.5

# TN12-150E [12V 150Ah,20hr]

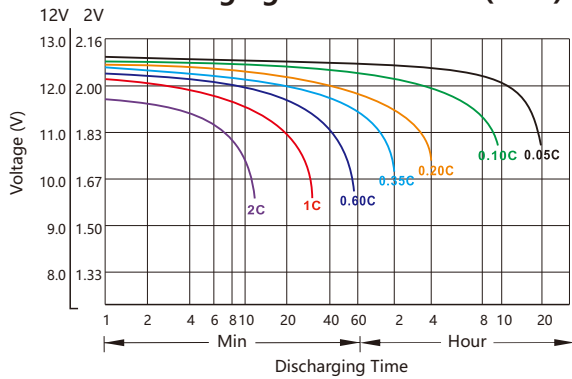


## Battery Dimensions(mm)

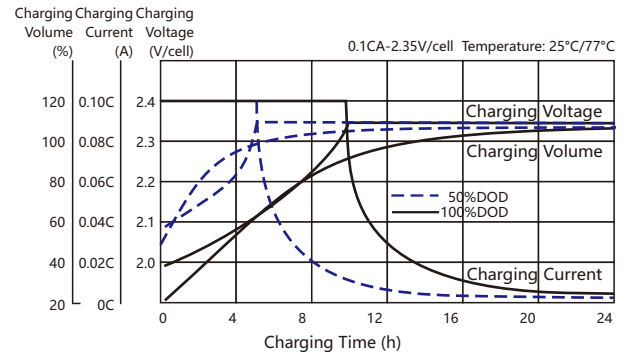


## Electrical Characteristics

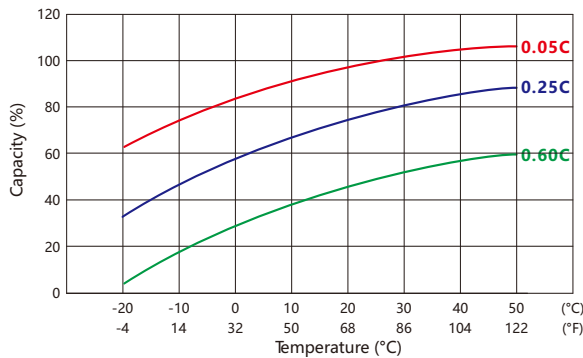
### Discharging Characteristics(25°C)



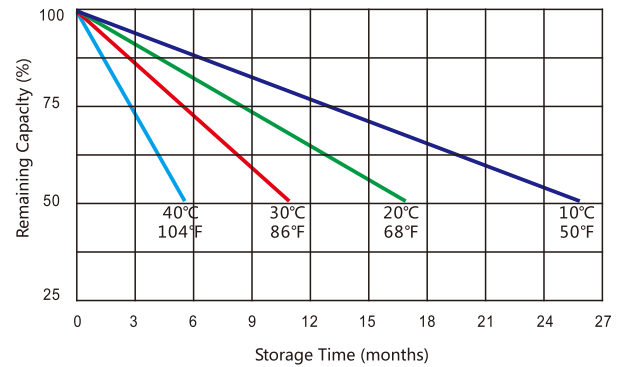
### Charging Characteristics(25°C)



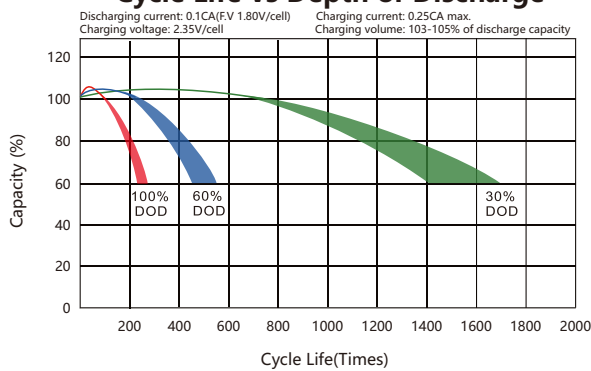
### Capacity vs Temperature



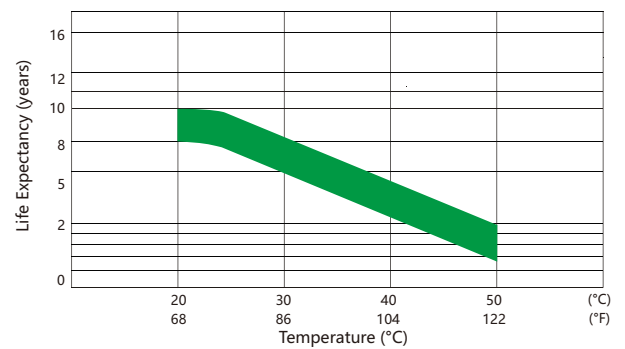
### Self-discharge vs Time



### Cycle Life vs Depth of Discharge



### Floating Life vs Temperature



## Usage and Maintenance

Charge Current	Equalization Charge	Float Charge
Limited current : $\leq 0.25 C_{10}A$	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