

# TN12-65 [12V 65Ah]

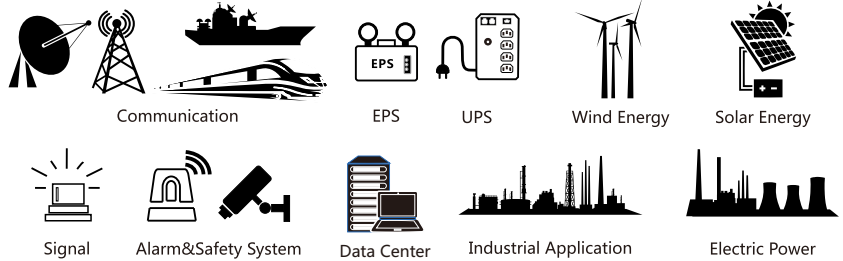


## Product Features

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 ±5%(mm/inch)				Weight (kg/lbs)	Terminal	Container
TN12-65	Length	Width	Height	Total Height	21.0/46.3	I3	ABS UL94-HB (Optional: FR ABS UL94-V0)
	350/13.8	167/6.57	180/7.09	180/7.09			

## Product Specifications

Nominal Voltage	Rated Capacity@25°C/77°F	Internal Resistance	Max. Discharge Current	Operating Temp. Range
12V	68.8Ah 20hr Rate (1.80V/cell) 65.0Ah 10hr Rate (1.80V/cell) 57.0Ah 5hr Rate (1.75V/cell) 51.6Ah 3hr Rate (1.70V/cell)	7.2mΩ@25°C/77°F	468A (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	128	101	88.2	76.2	58.2	44.1	36.6	21.8	15.9	12.7	10.7	9.36	7.54	6.33	3.38
1.80V/cell	156	119	99.1	83.1	61.6	46.9	38.4	22.8	16.6	13.2	11.1	9.72	7.77	6.50	3.44
1.75V/cell	180	130	108	88.2	65.1	49.1	39.9	23.4	17.0	13.5	11.4	9.94	7.93	6.64	3.51
1.70V/cell	200	141	112	91.6	68.3	50.7	41.2	23.7	17.2	13.8	11.6	10.1	8.07	6.76	3.58
1.67V/cell	211	148	117	95.3	70.6	52.1	42.1	24.3	17.5	14.0	11.8	10.2	8.14	6.85	3.64
1.60V/cell	226	157	123	100	74.0	54.0	43.1	24.6	17.8	14.2	12.0	10.4	8.23	6.95	3.71

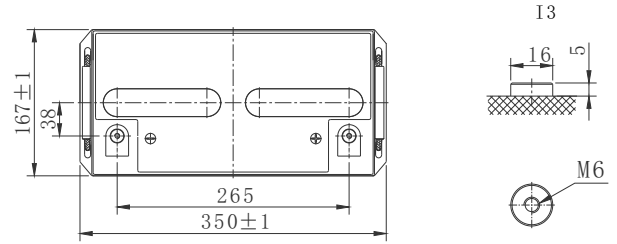
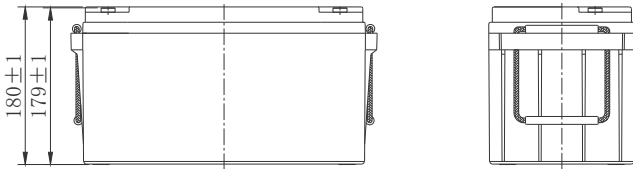
## Constant Power Discharge (W/cell)@25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	238	192	169	148	114	87.5	72.9	43.9	32.3	25.7	21.8	19.1	15.5	13.0	6.96
1.80V/cell	289	224	190	161	121	92.8	76.3	45.6	33.5	26.8	22.6	19.8	15.9	13.3	7.06
1.75V/cell	335	245	205	170	127	96.9	79.0	46.7	34.1	27.3	23.1	20.2	16.2	13.6	7.18
1.70V/cell	371	264	213	176	133	99.8	81.4	47.3	34.5	27.7	23.4	20.4	16.4	13.7	7.30
1.67V/cell	390	277	221	182	137	102	83.1	48.2	35.0	28.1	23.7	20.7	16.5	13.9	7.41
1.60V/cell	416	292	232	191	143	106	84.6	48.8	35.5	28.4	24.0	20.8	16.6	14.0	7.53

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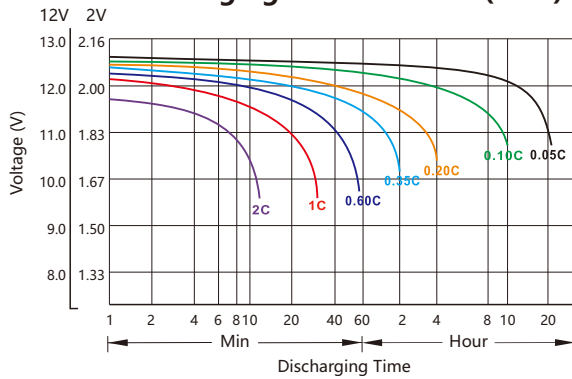


## Battery Dimensions(mm)

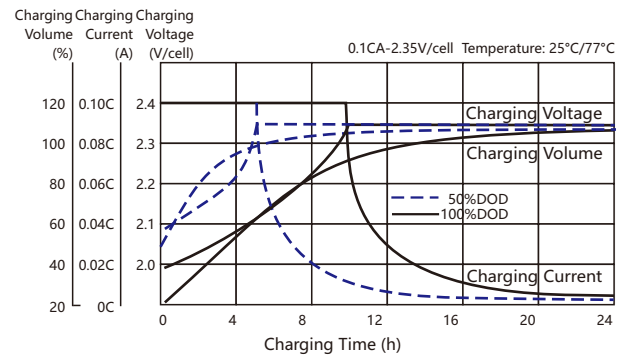


## Electrical Characteristics

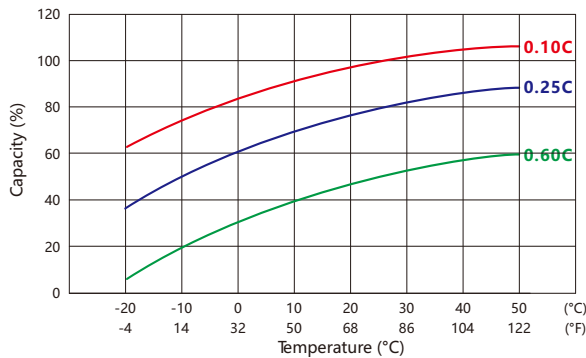
### Discharging Characteristics(25°C)



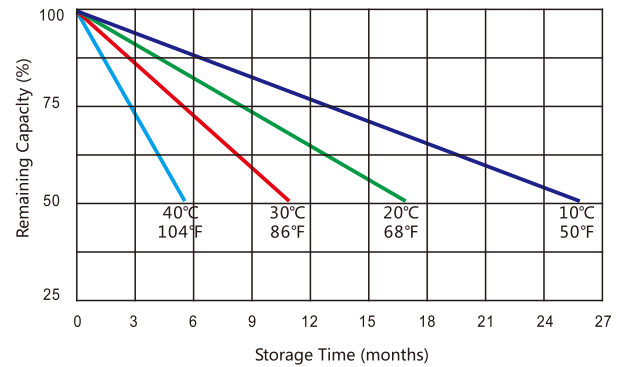
### Charging Characteristics(25°C)



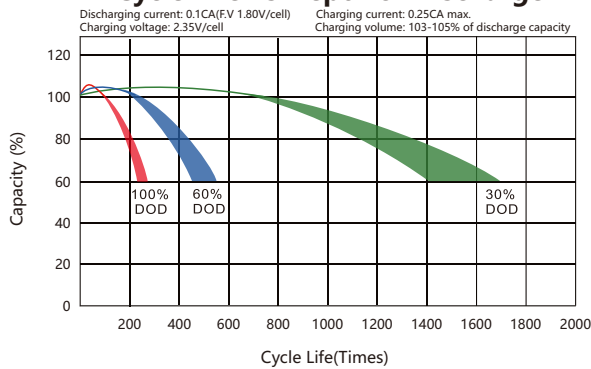
### Capacity vs Temperature



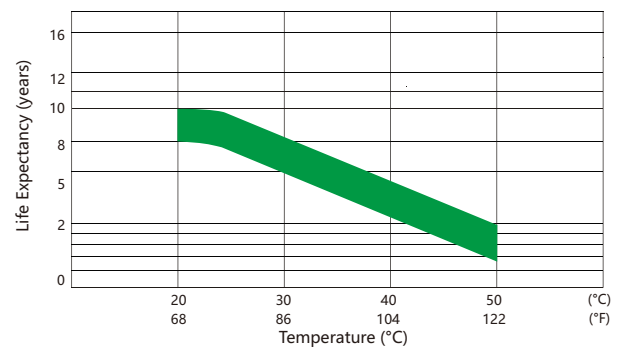
### Self-discharge vs Time



### Cycle Life vs Depth of Discharge



### Floating Life vs Temperature



## Usage and Maintenance

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