

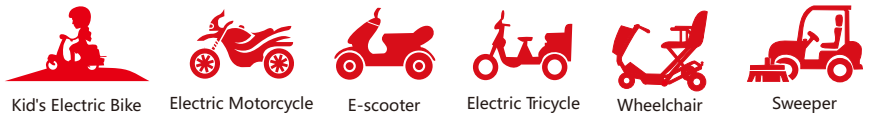
TNEH 12-40 [12V40Ah]



Product Features

Deep Cycle Black Gold Series 500~600 Cycle Times @100%DOD			
↑20% Cycle Life Three advanced material	Carbon Fiber	Graphene	Rare-earth alloy
	↑10% Discharge Power Positive Carbon Fiber	↑15% Low Temp. Capacity Negative graphene formula	↓50% Grid Corrosion Rare-earth patent alloy

Product Applications



Physical Specification

Model	Dimensions (mm/inch)				Weight (kg/lbs)	Terminal	Container
TNEH12-40	Length	Width	Height	Total Height	10.0/22.05	I10	ABS UL94-HB (Optional: FR ABS UL94-V0)
	267/10.51	77/3.03	170/6.69	175/6.89			

Product Specifications

Nominal Voltage	Rated Capacity 25°C/77°C	Operating Temp. Range	Capacity Effected Temp	Capacity vs Storage Time
12V	40Ah 20hr Rate (1.80V/cell) 38.5Ah 10hr Rate (1.75V/cell) 36.5Ah 5hr Rate (1.75V/cell) 35.5Ah 3hr Rate (1.75V/cell)	Discharge: -15~50°C (5~122°F) Charge: 0~40°C (32~104°F) Storage: -15~40°C (5~104°F) Optimum: 25±3°C (77±5°F)	40°C (104°F): 106% 25°C (77°F): 100% 0°C (32°F): 90% -15°C (5°F): 76%	Three months : 90% Six months : 80% Nine months : 60%

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

F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	42.9	30.6	24.5	14.0	11.0	8.55	6.87	5.83	4.49	3.68	1.93
1.80V/cell	44.4	31.5	25.2	14.5	11.4	8.80	7.14	6.04	4.62	3.77	2.00
1.75V/cell	45.6	32.6	26.2	15.4	11.8	9.11	7.30	6.17	4.75	3.85	2.04
1.70V/cell	46.7	33.5	27.1	15.6	12.1	9.43	7.60	6.47	4.87	3.95	2.08
1.68V/cell	47.7	34.6	28.0	15.8	12.2	9.52	7.77	6.50	4.97	4.02	2.10
1.60V/cell	49.0	35.6	28.6	16.3	12.7	9.80	7.94	6.70	5.10	4.15	2.12

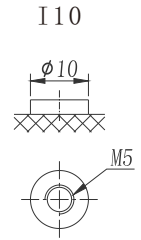
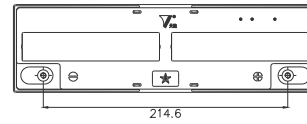
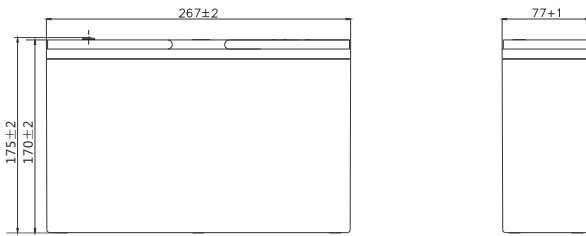
Constant Power Discharge (W/cell)@25°C (77°F)

F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	83.8	60.1	48.4	27.9	22.0	17.2	13.9	11.8	9.10	7.46	3.94
1.80V/cell	86.4	61.7	49.7	28.8	22.8	17.6	14.3	12.2	9.33	7.63	4.05
1.75V/cell	88.4	63.8	51.4	30.5	23.5	18.2	14.6	12.4	9.56	7.76	4.12
1.70V/cell	90.1	65.0	52.9	30.8	23.9	18.7	15.1	12.9	9.73	7.91	4.19
1.68V/cell	91.2	66.6	54.4	31.0	24.1	18.8	15.4	12.9	9.87	7.99	4.20
1.60V/cell	92.9	68.0	55.0	31.7	24.7	19.2	15.6	13.2	10.0	8.19	4.21

TNEH 12-40 [12V40Ah]

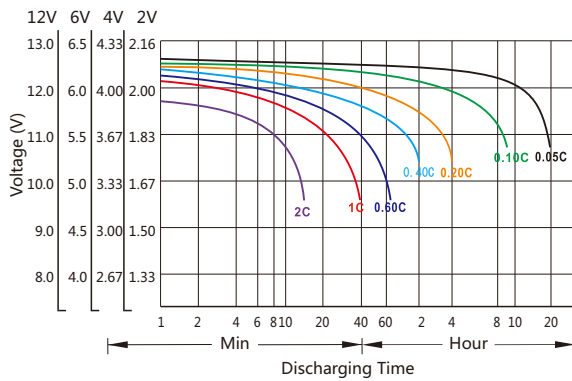


Battery Dimensions(mm)

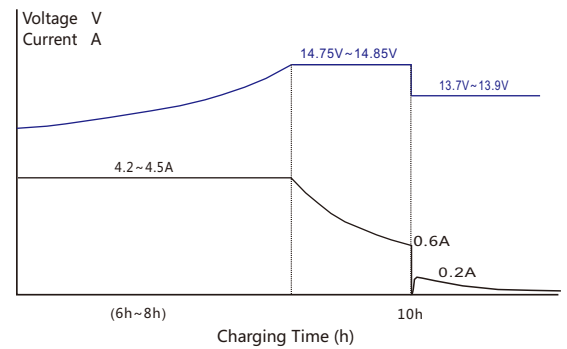


Electrical Characteristics

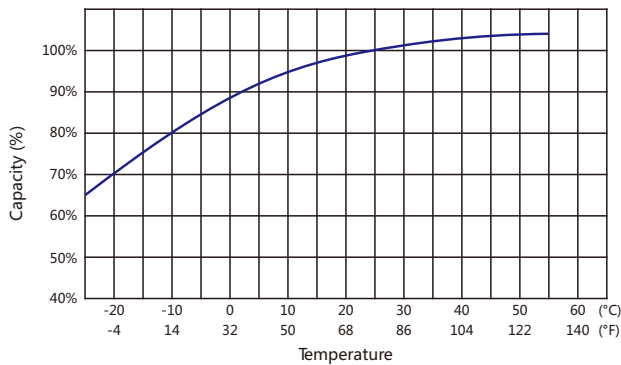
Discharging Characteristics@25°C(77°F)



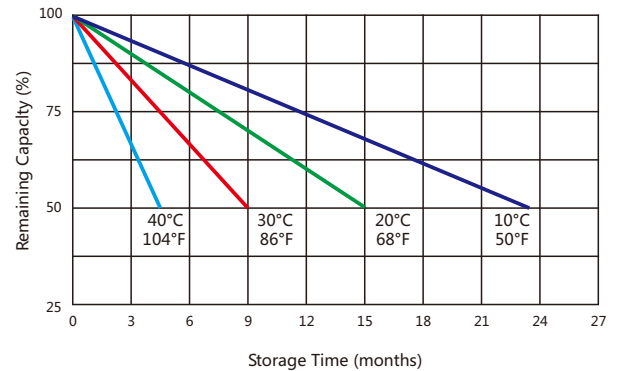
Charging Characteristics@25°C(77°F)



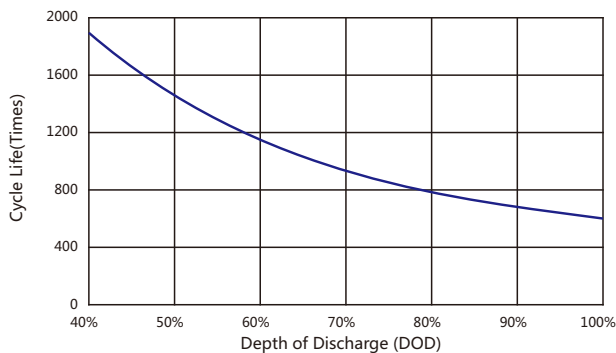
Capacity vs Temperature



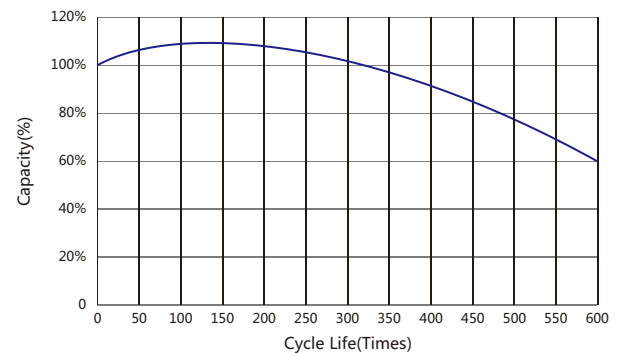
Self-discharge vs Time



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



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



Usage and Maintenance

Limited Current

Limited current : $\leq 0.2C_A$

Limited Voltage

14.75~14.85V@25°C(77°F)
Temp.Coefficient: -24mV/°C

Limited Voltage

13.7~13.9V@25°C(77°F)
Temp.Coefficient: -18mV/°C