THE ENERGY DOCTOR®

TED

BATTERY EXPERTS

TECHNICAL DATA SHEET

TED1258EV 12V 58Ah



- Long cycle life: approx. 400–600 cycles 100% DOD. Flame retardant (UL94) HBO.
- Higher energy capacity: +10% compared to standard (patent negative pasting formula).
- Better durability: less then 50% grid corrosion resistance (rare-earth patent alloy).
- Extended performance: 0% acid stratification (nano silica GEL technology).

PHYSICAL SPECIFICATIONS

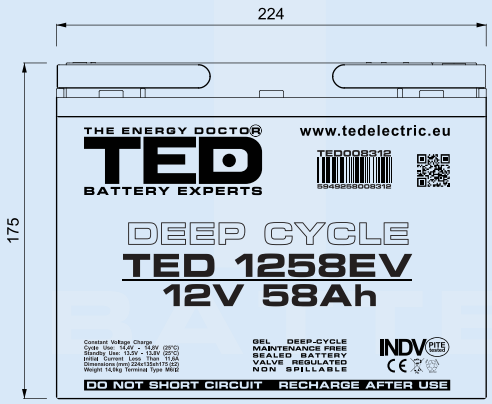
Model	Dimensions (mm)			Weight (kg)	Terminal	Design Life
	Length	Width	Height			
TED008312	224	135	175	14.0 kg	M6/I2	20°C (68°F): 5-7 Years

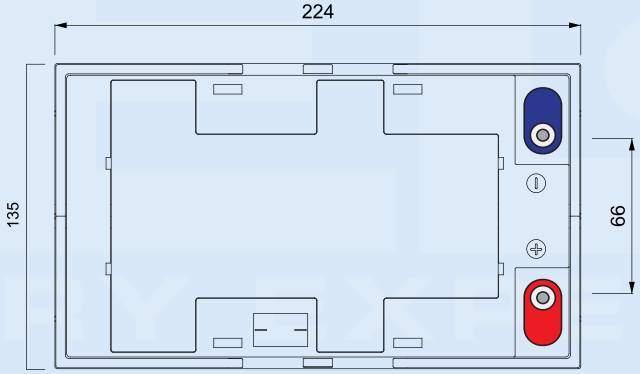
PRODUCT SPECIFICATIONS

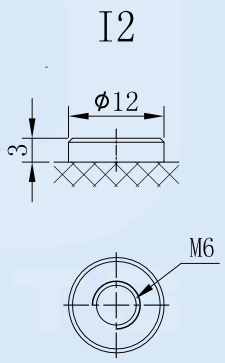
Nominal Voltage	Rated Capacity25°C/77°C	Operating Temp.Range	Capacity Effected Temp	Capacity vs Storge Time (25°C/77°F)
12V	58Ah 20hr Rate (1.80V/cell)	Discharge: -15°C ~ 50°C	40°C (104°F): 106%	3 months: 90%
	55Ah 10hr Rate (1.75V/cell)	Charge: 0°C ~ 40°C	25°C (77°F): 100%	6 months: 80%
	54Ah 5hr Rate (1.75V/cell)	Storage: -15°C ~ 40°c	0°C (32°F): 85%	9 months: 60%
	52Ah 3hr Rate (1.75V/cell)	Optimum: 25°C ± 2°C	-15°C (5°F): 72%	12 months: 45%

Charging Current	Limited Voltage	Floating Voltage
Limited Current: ≤ 11.6A (0.2C2A)	14.6 ~ 14.8V 25°C (77°F)	13.6 ~ 13.8V 25°C (77°F)
Container Material	**Internal Resistance**	**Maximum Discharge Current**
ABS UL94-HBO	~ 7.5mΩ	580A

PRODUCT DIMENSIONS







THE ENERGY DOCTOR®

TED

BATTERY EXPERTS

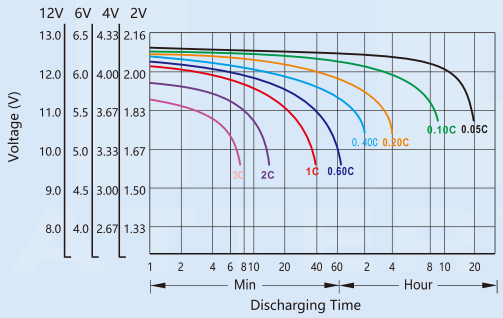
Constant Current Discharge (A) at 25°C (77°F)

F.V/Time	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/Cell	59.1	42.1	33.7	19.3	16.1	12.4	10.1	8.48	6.46	5.24	2.80
1.80V/Cell	61.2	43.3	34.8	19.9	16.7	12.8	10.4	8.79	6.66	5.39	2.90
1.75V/Cell	62.8	45.0	36.0	21.2	17.3	13.3	10.7	9.02	6.86	5.52	2.96
1.70V/Cell	64.4	46.1	37.3	21.5	17.7	13.7	11.1	9.34	70.2	5.66	3.02
1.67V/Cell	65.7	47.6	38.6	21.8	17.9	13.8	11.3	9.42	7.14	5.74	3.05
1.60V/Cell	67.4	49.0	39.4	22.5	18.6	14.2	11.5	9.67	7.30	5.89	3.07

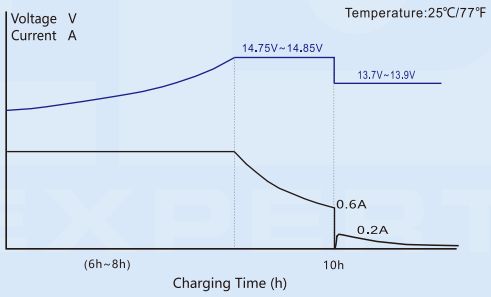
Constant Power Discharge (W/ce11) at 25°C (77°F)

F.V/Time	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/Cell	115	82.8	66.7	38.5	32.3	25.0	20.3	17.1	13.1	10.6	5.71
1.80V/Cell	119	84.9	68.5	39.6	33.4	25.7	21.0	17.7	13.4	10.9	5.88
1.75V/Cell	122	87.9	70.8	42.0	34.5	26.5	21.5	18.1	13.8	11.1	5.97
1.70V/Cell	124	89.5	72.9	42.4	35.1	27.1	22.0	18.6	14.0	11.3	6.08
1.67V/Cell	126	91.7	75.0	42.6	35.3	27.2	22.3	18.6	14.2	11.4	6.09
1.60V/Cell	128	93.7	75.7	43.7	36.2	27.8	22.6	19.9	14.4	11.6	6.13

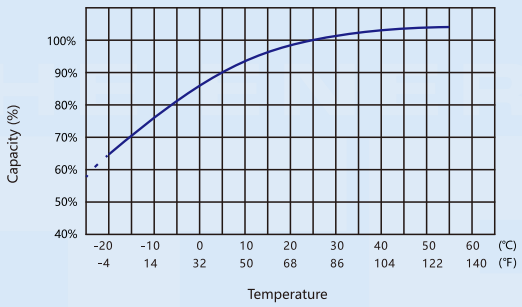
Discharging Characteristics@25℃(77℉)



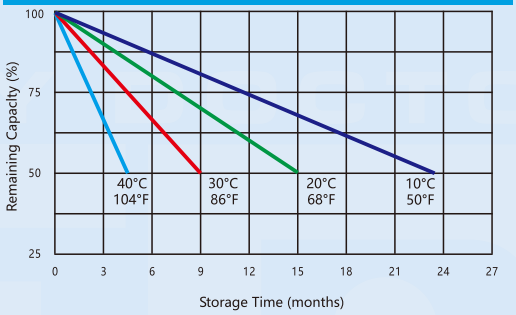
Charging Characteristics@25℃(77℉)



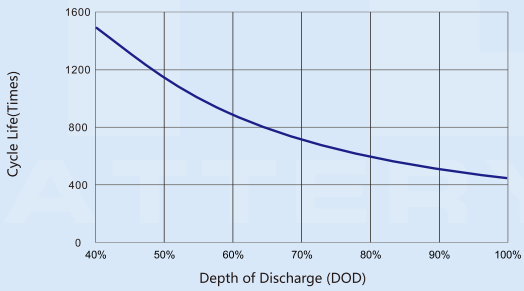
Capacity vs Temperature



Self-discharge vs Time



Cycle Life vs Depth of Discharge@25℃(77℉)



Cycle Life vs Remaining Capacity@25℃(77℉)

