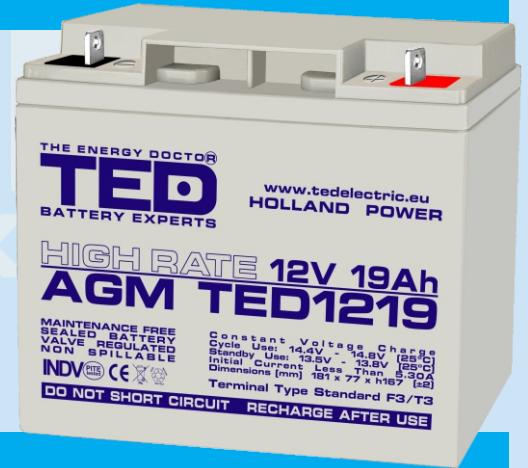


## Physical Specifications

Part Number: AGM High Rate TED1219  
 Length: 181 ± 2 mm (7.13 inches)  
 Width: 77 ± 2 mm (3.03 inches)  
 Weight: 5.3kg (11.68lbs)  
 Height: 167.5 ± 2 mm (6.59 inches)

Standard case material is flame retardant to (UL94) HBO.  
 The TED Batteries range provide an extremely reliable and versatile valve regulated lead acid battery. Their unique construction and sealing techniques ensures that no electrolyte leakage can occur, and provides safe and effective operation in any orientation, and meets all requirements of the International Air Transport Association Dangerous Goods Regulations to allow transportation by air.



## Specifications

Terminal Type: Standard F3/T3 or any suitable terminal (at customer request)

Design Floating Life 20°C (68°F): 6 Years

Maxim Discharge Current: 300A/5sec.

Internal Resistance Approximative: 12mΩ

Cycle Use: Initial Charging Current Less Than 6.0A • Voltage 14.4±14.8 at 25°C (77°F) • Temperature Coefficient -30mV/°C  
 Standby Use: No Limit on Initial Charging Current Voltage 13.5±13.8V at 25°C (77°F) • Temperature Coefficient -20mV/°C  
 Capacity Affected by Temperature 40°C (104°F) 103% 25°C (77°F) 100% 0°C (32°F) 86%

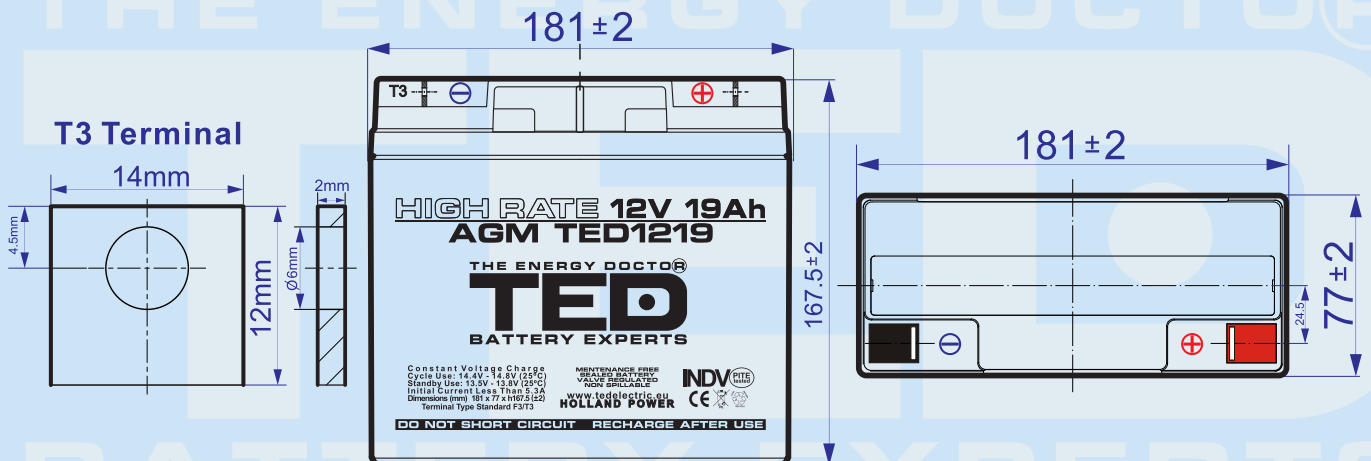
Self Discharge: TED Batteries may be stored for up to 6 months at 25°C (77°F) and than refresh charge is required. For higher temperatures, the time interval will be shorter.

## Rated Capacity

19.5 Ah/1.96A	20hr	1.80V/cell 25°C/77°F
18.9 Ah/2.36A	10hr	1.80V/cell 25°C/77°F
17.9 Ah/3.58A	5hr	1.75V/cell 25°C/77°F
16.1 Ah/5.39A	3hr	1.75V/cell 25°C/77°F
13.6 Ah/13.6A	1hr	1.60V/cell 25°C/77°F

## Discharge Characteristics

<b>Operating Temperature Range</b>
Charge: 0°C±40°C (5°F±104°F)
Storage: -15°C±40°C (5°F±104°F)
Nominal: 25°C±3°C (77°F±5°F)
Discharge: -15°C±50°C (5°F±122°F)



Due to continuous product improvements, program specifications are subject to change without notice

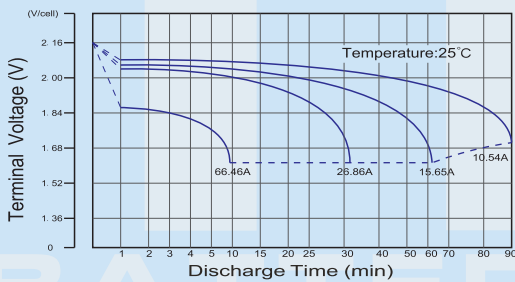
**Constant Current Discharge (Amperes) at 25°C**

F.V/Time	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	79.18	68.85	57.24	50.50	39.04	31.60	23.14	13.49	9.833
1.67V	73.27	63.71	53.70	47.39	37.01	29.48	22.06	12.86	9.361
1.70V	70.22	61.06	51.81	45.67	35.87	28.35	21.43	12.49	9.080
1.75V	66.32	57.67	49.22	42.89	34.19	27.58	20.83	12.28	8.877
1.80V	62.38	54.24	46.63	40.08	32.48	26.76	20.19	12.04	8.662
1.85V	58.21	50.62	43.84	37.16	30.63	25.83	19.44	11.75	8.402

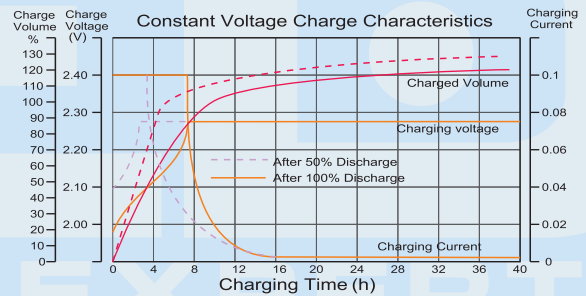
**Constant Power Discharge (Watts) at 25°C**

F.V/Time	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	143	125	105	93.4	72.6	58.1	42.6	25.0	18.3
1.67V	134	117	99.6	88.5	69.5	54.7	41.0	24.0	17.5
1.70V	130	113	97.3	86.3	68.2	53.2	40.3	23.6	17.2
1.75V	124	108	93.6	82.0	65.8	52.4	39.7	23.5	17.0
1.80V	119	103	89.9	77.8	63.4	51.6	39.0	23.4	16.9
1.85V	113	98.2	86.3	73.6	61.0	50.8	38.4	23.3	16.7

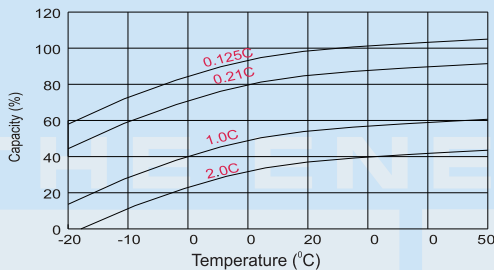
**Discharge Characteristics**



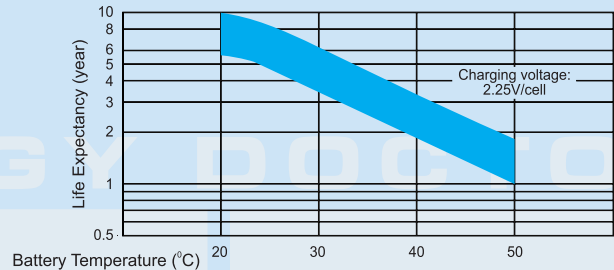
**Float Charging Characteristics**



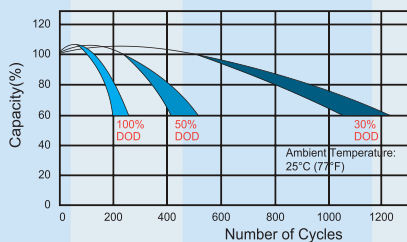
**Temperature Effects in Relation to Battery Capacity**



**Effect of Temperature on Long Term Float Life**

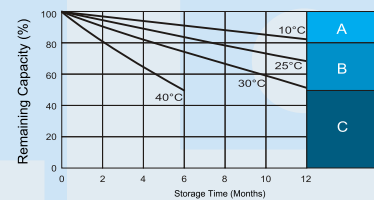


**Cycle Life in Relation to Depth of Discharge**



Testing condition  
 Discharging current 0.17C (FV 1.7V/cell);  
 Charging current 0.25C max, voltage 2.45V/cell;  
 Charging volume: 125% of discharged capacity.

**Self Discharge Characteristics**



- A** No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:  
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.  
 3. Charged for 8-10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity. The battery should never be left standing III this is reached.

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