



## FEATURES



Compact size ideal for any type of use.

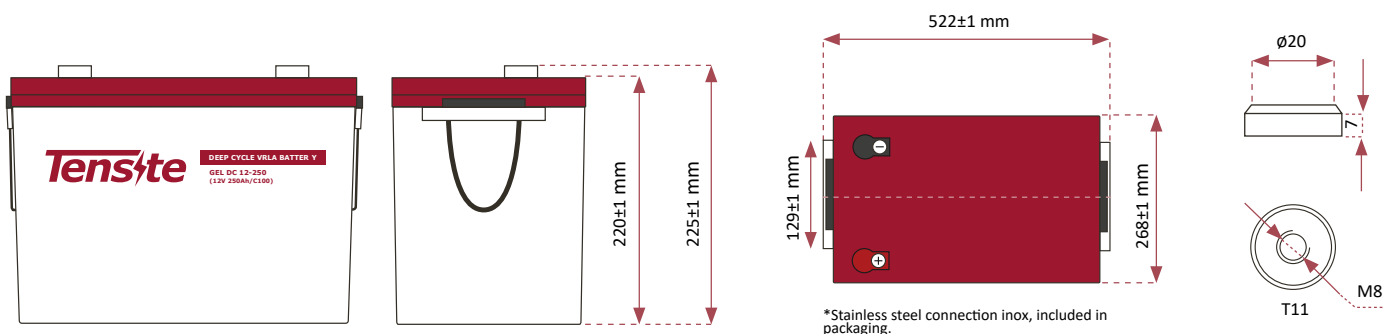


High performance due to its deep discharge life cycle.



Designed for photovoltaic installations.

## DIMENSIONS



## GEL BATTERY 12V 300 AH

### GEL SERIES BATTERY

The GEL series batteries incorporate the new CCDR continuous lamination stamped plate technology, which allows them to withstand deep cyclic charge and discharge applications. The batteries use colloidal or foamed silica gel that immobilises the electrolyte, which further enhances the cycling stability and eliminates stratification.

Gel series batteries are the special design batteries with 15 years floating design life at 20°C. Meet with IEC, BS, JIS and Eurobat standards.



### APPLICATION

- Emergency power system.
- Communication equipment.
- Telecommunications systems.
- Uninterruptible power supplies.
- Electric wheelchairs.
- Electric toys, cars and wheelchairs.
- Power tools.
- Golf carts and buggies.
- Marine equipment.
- Medical equipment.
- Solar and wind power system.

### GENERAL FEATURES

- Safety sealing.
- Non-spillable technology.
- High power density.
- Excellent deep discharge recovery.
- Thick plates and highly active materials.
- Longer life and low self-discharge design.

### TECHNICAL SPECIFICATIONS

BATTERY MODEL	Nominal voltage				12 V			
	Rated capacity (100 hour rate)				300 Ah			
	Cells Per battery				6			
DIMENSION	Length	Width	Height	Total Height				
	520 mm	268 mm	220mm	225 mm				
APPROXIMATE WEIGHT	67 kg ± 3%							
CAPACITY @ 25°C	10 hour rate (9.1A)	5 hour rate (15.1A)	3 hour rate (23.8A)	1 hour rate (33.8A)				
	250 Ah	219 Ah	199 Ah	162 Ah				
MAX. DISCHARGE CURRENT	2500 A (5 sec.)							
MAX. CHARGE CURRENT	75 A							
INTERNAL RESISTANCE	Fully charged at 25°C: Approx. 3.0mΩ							
CAPACITY VS TEMPERATURE	40°C	25°C	0°C	-15°C				
	102%	100%	85%	65%				
SELF DISCHARGE @ 25°C	After 3 months in storage		After 6 months in storage		After 12 months in storage			
	91%		82%		64%			
CHARGE METHOD @ 25°C	Cycle Use			Float Use				
	14.40 - 15.0 V			13.5 ~ 13,80 V				
CONSTRUCTION	Container	Electrolyte	Separators	Positive	Negative	Valve	Terminal	
	ABS (UL94-HB) / Flame retardant ABS (UL94-V0)	Sulfuric acid thixotropic Gel	Macromolecule polymer	Lead Dioxide	Lead	EPDR	Copper	

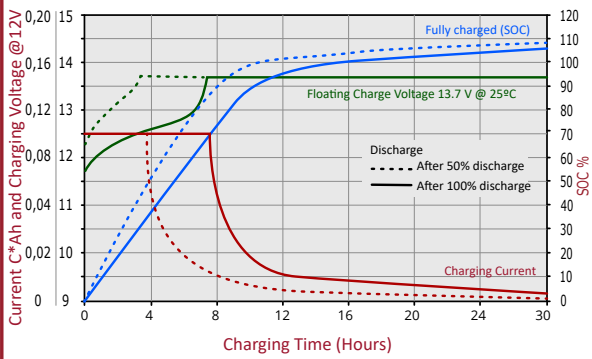
### BATTERY DISCHARGE TABLE

F.V / TIME		CONSTANT CURRENT (AMP) AND CONSTANT POWER (WATT) DISCHARGE TABLE AT 25 °C							
		10 min	15 min	30 min	1 hr	3 hrs	5 hrs	10hrs	20 hrs
1.60	A	560.0	422.1	262.6	184.8	74.1	47.7	26.00	13.00
	W	1044.4	787.2	489.8	344.7	138.2	89.0	48.5	25.7
1.65	A	516.3	404.5	255.6	179.9	72.8	47.0	25.75	13.13
	W	962.8	754.4	476.7	335.4	135.7	87.7	48.0	25.9
1.70	A	525.0	386.9	248.6	174.9	71.4	46.4	25.50	13.38
	W	979.1	721.6	463.6	326.2	133.2	86.4	47.6	26.4
1.75	A	463.8	369.3	241.5	170.0	69.7	45.7	25.25	13.13
	W	864.9	688.8	450.5	317.0	130.0	85.2	47.1	25.9
1.80	A	437.5	351.8	234.5	165.0	68.0	45.0	25.00	13.00
	W	815.9	656.0	437.3	307.7	126.8	83.9	46.6	25.7

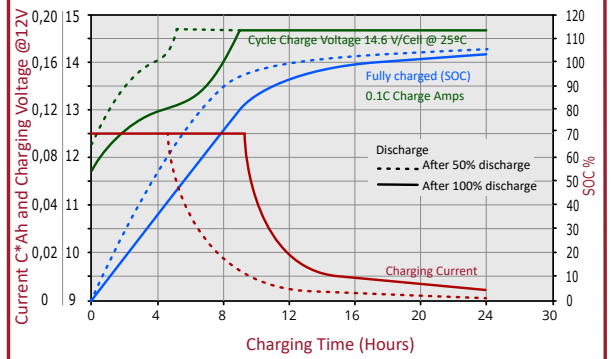
**USE IN FLOTATION:** The battery is connected to the charger continuously, maintaining the charge at 100%, ready for discharge at specific times. This is the case of alarms, UPS systems, backup systems, telecommunications backup.

**USE IN CYCLES:** The battery is charged and discharged, repeating this cycle regularly. This is the case for residential photovoltaic installations (day/night), electric cars and in applications that are consumed when no load is available. The starting of combustion engines would be an application that combines both types of use.

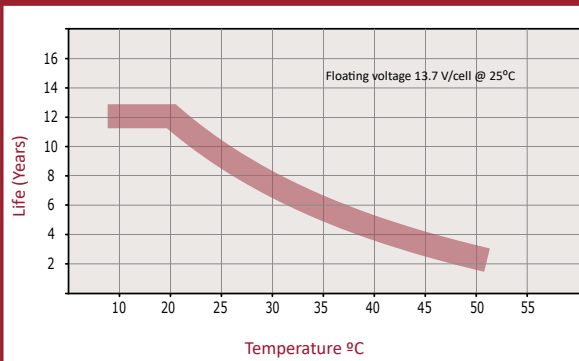
### Float Use: Charging Characteristics



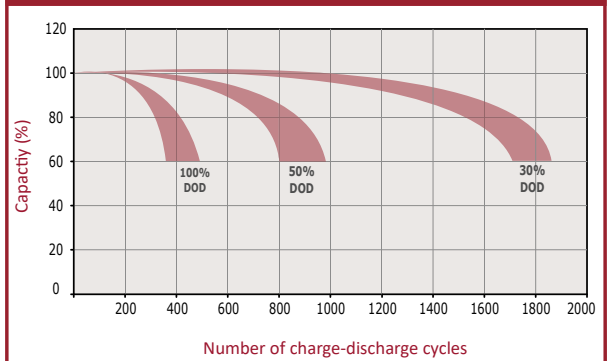
### Cycle Use: Charging Characteristics



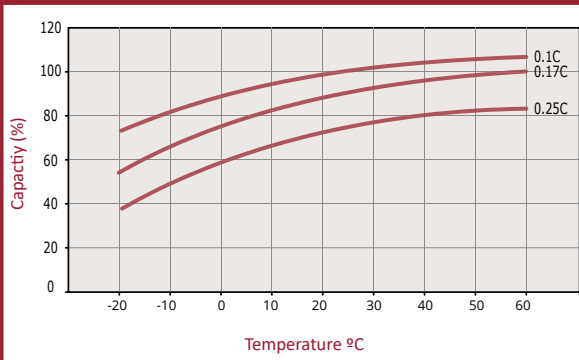
### Expected life at Flotation and Temperature



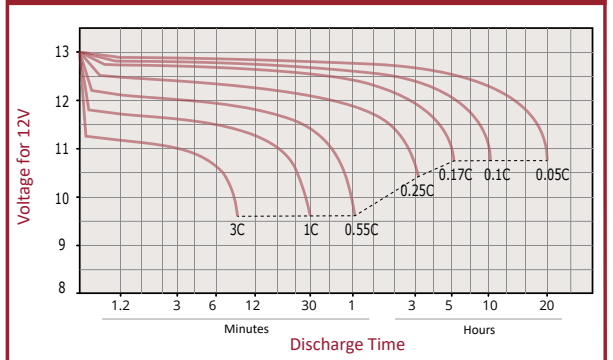
### Cycle life in relation to Depth of Discharge



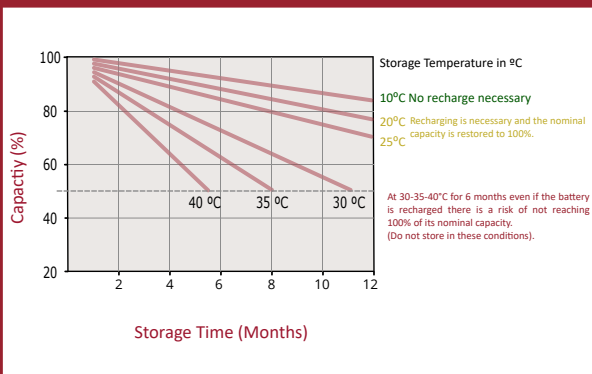
### Temperature effects in relation to battery capacity



### Discharge Characteristics 25°C (77°F)



### Self-Discharge Characteristics with Temperature



### Voltage Charge and Temperature

