



FEATURES



Compact size ideal for any type of use.

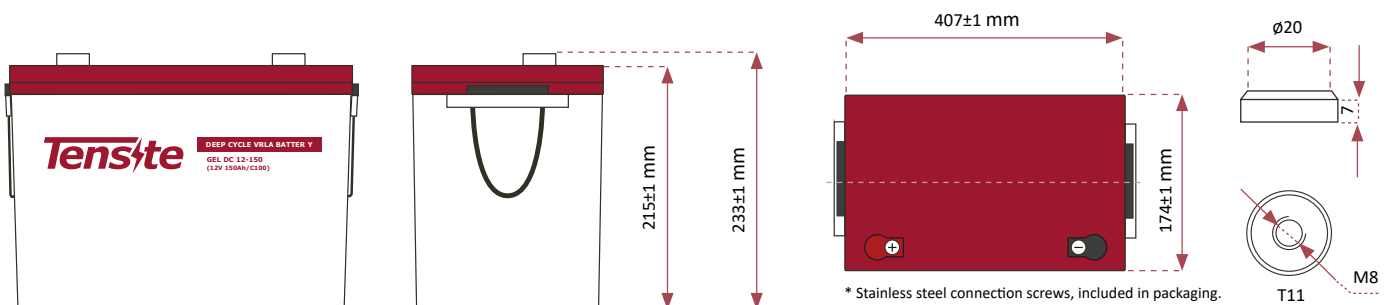


High performance due to its deep discharge life cycle.



Designed for photovoltaic installations.

DIMENSIONS



DEEP CYCLE BATTERY AGM 12V 150 AH

DEEP CYCLE SERIES BATTERY

The CCDR series VRLA batteries are superior deep cycle design with thick plates, high-density active materials and slightly stronger electrolyte which can withstand repeated deep cyclic applications.

Deep Cycle series batteries are the special design batteries with 6 years floating life at 25°C. Meet with IEC, BS, JIS, Eurobat, UL (MH62092) and CE approved.



APPLICATION

- Emergency power system.
- Communication equipment.
- Telecommunications systems.
- Uninterruptible power supply.
- Electric wheelchairs.
- Electric toys, cars and motorcycles.
- Electric tools.
- Golf carts and buggies.
- Marine electrical equipment.
- Emergency medical equipment.
- Camping and caravans.
- Solar and wind energy systems.

GENERAL FEATURES

- Safety sealing.
- Anti-spill technology.
- High power density.
- Excellent deep discharge recovery.
- Thick plates and highly active materials.
- Longer service life and low self-discharge.

TECHNICAL SPECIFICATIONS

BATTERY MODEL	Nominal Voltage				12 V		
	Rated Capacity (100 Hour rate)				150 Ah		
	Cells per battery				6		
DIMENSIONS	Length	Width	Height	Total Height			
	407 mm	174 mm	215 mm	233 mm			
APPROXIMATE WEIGHT	33,8 kg ± 3%						
CAPACITY @ 25°C (77 °F)	10 hours	5 hours	3 hours	1 hour			
	120 Ah	96 Ah	87 Ah	72 Ah			
MAXIMUM DISCHARGE CURRENT	1200 A (5 sec.)						
MAXIMUM CHARGE CURRENT	36 A						
INTERNAL RESISTANCE	Fully charged at 25°C: Approximately 3,9 mΩ						
CAPACITY VS TEMPERATURE	40°C	25°C	0°C	-15°C			
	103%	100%	86%	65%			
SELF DISCHARGE @ 25°C	After 3 months in storage		After 6 months		After 12 months		
	91%		82%		64%		
CHARGE METHOD @ 25°C	Cycle Use			Float Use			
	14,3 - 14,6 V			13,6 - 13,8 V			
CONSTRUCTION	Container	Electrolyte	Separators	Positive	Negative	Valve	Terminal
	ABS (UL94-HB) / Flame retardant ABS (UL94-V0)	Sulfuric acid	Fiber glass	Lead dioxide	Lead	EPDR	Copper

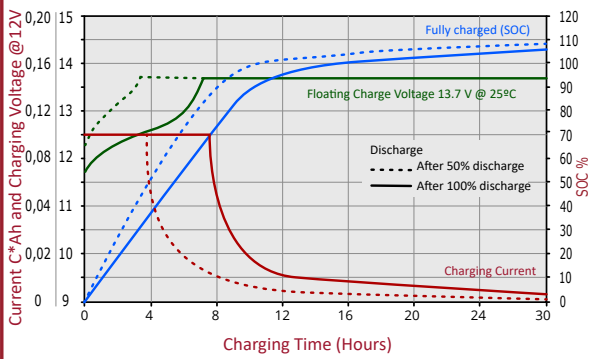
BATTERY DISCHARGE TABLE

F.V / TIME		CONSTANT CURRENT(A) AND CONSTANT POWER (W) DISCHARGE TABLE AT 25°C							
		10 min	15 min	30 min	1 hr	3 hrs	5 hrs	10hrs	20 hrs
1.60	A	253.00	204.00	137.00	72.00	31.00	19.80	12.60	6.80
	W	450.66	364.83	245.16	129.66	57.16	37.51	24.25	13.18
1.70	A	228.00	192.00	131.00	68.00	30.00	19.40	12.40	6.60
	W	425.16	358.50	244.66	127.50	57.83	37.76	24.20	12.90
1.75	A	204.00	168.00	122.00	66.00	29.00	19.20	12.10	6.60
	W	387.50	319.83	234.83	126.50	56.83	37.51	23.90	13.00
1.80	A	193.00	156.00	113.00	63.00	28.50	18.70	12.00	6.50
	W	370.16	300.00	217.83	123.00	56.16	36.88	23.76	12.86
1.85	A	180.00	144.00	101.00	61.00	28.00	18.20	11.40	6.10
	W	348.33	279.83	196.50	120.00	54.66	36.28	22.93	12.36

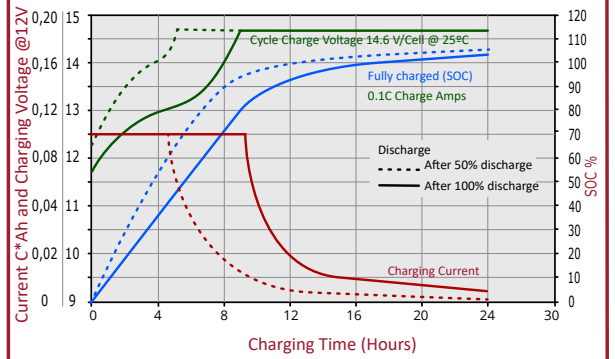
USE IN FLOTATION: The battery is connected to the charger continuously, maintaining the charge at 100%, ready for discharge at specific times. This is the case of alarms, UPS systems, backup systems, telecommunications backup.

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.

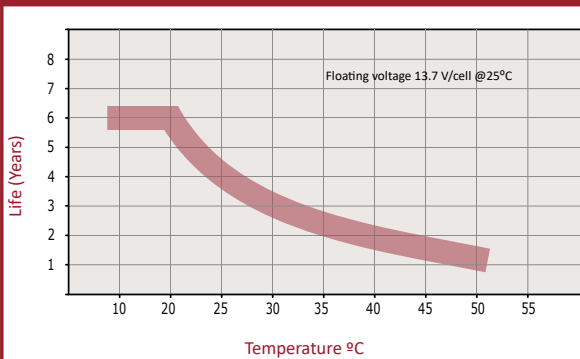
Float Use: Charging Characteristics



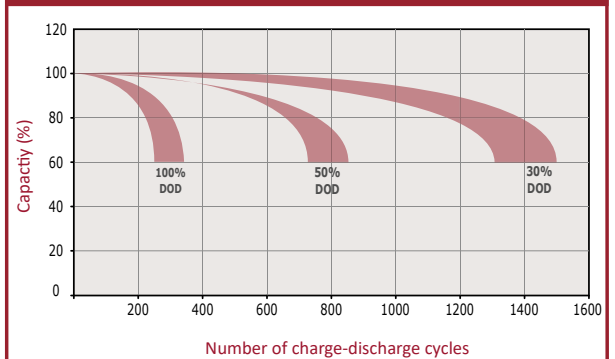
Cycle Use: Charging Characteristics



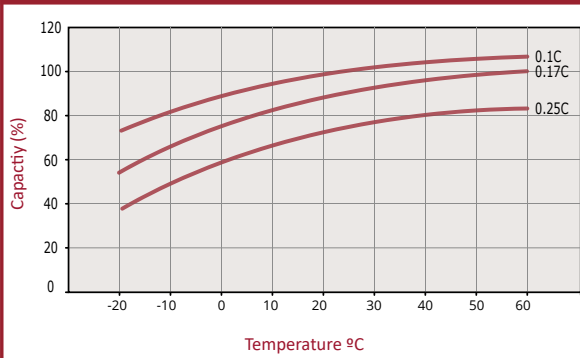
Expected life at Flotation and Temperature



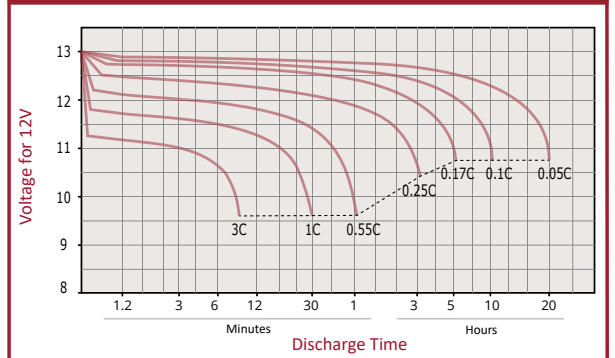
Cycle life in relation to Depth of Discharge



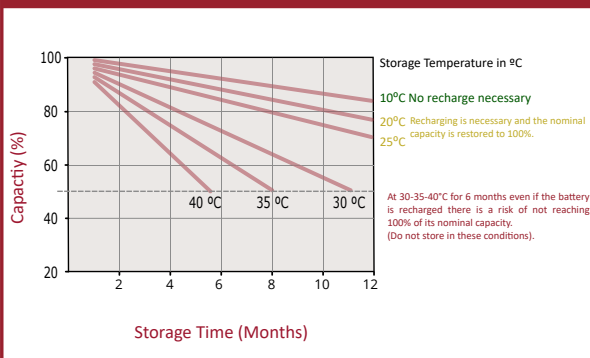
Temperature effects in relation to battery capacity



Discharge Characteristics 25°C (77°F)



Self-Discharge Characteristics with Temperature



Voltage Charge and Temperature

