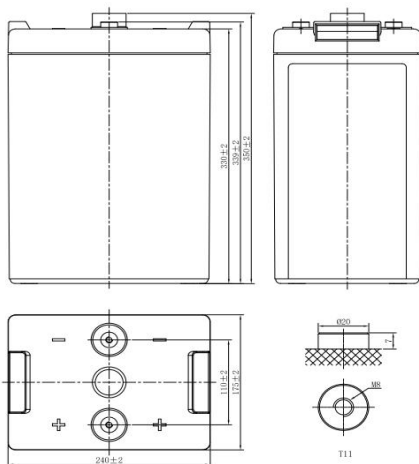
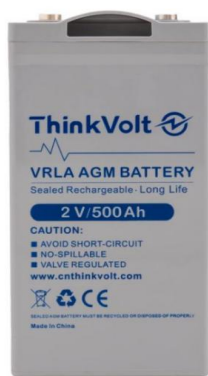




TVL SERIES-VRLA Long Life Battery

TVL2-500 (2V500Ah)



CHARACTERISTICS

Rated Voltage	2V	
Nominal Capacity (25°C)	C ₁₀ , 1.80V/cell	500Ah
Dimension	Length	240mm (9.45inches)
	Width	175mm (6.89inches)
	Container Height	330mm (13.0inches)
	Total Height	350mm (13.8inches)
Approx Weight	30.0kg (66.1lbs)	
Terminal	T11	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	6000A	
Internal Resistance (25°C)	Approx 0.55 mΩ (Fully charged)	
Operating Temp. Range	Discharge	-15~50°C (5~122°F)
	Charge	-20~40°C (-4~104°F)
	Storage	-15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Max.Charging Current (25°C)	0.3C	
Charge voltage (25°C)	Standby Use	Cycle Use
	2.25-2.30V/cell	2.35-2.40V/cell
Temp. Coefficient	-3mV/cell/°C	-5mV/cell/°C
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	1. ≤3% per month at 25°C (77°F). 2. TVL series batteries may be stored up to 6 months at 25°C (77°F) and then a freshening charge is required. 3. For higher temperatures the time interval will be shorter.	

DISCHARGE TABLE

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

F.V/Time	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	315	275.1	240.8	189.9	153.8	117	94.1	79.4	69	56	46.9	25.1
1.80V/cell	361.7	307.7	266.5	207.8	167.4	126.6	101.5	85.6	74	60	50	26.5
1.75V/cell	378.5	320.2	276.4	214.8	172.5	130	104	87.5	75.5	61.1	50.8	26.8
1.70V/cell	402.9	332.3	286.5	222	178	133.8	106.6	89.5	77.1	62.2	51.6	27.2
1.67V/cell	414.1	339.8	292.5	226	181	135.8	108.1	90.6	78.1	62.8	52	27.4
1.60V/cell	421.8	357.3	306.7	236.1	188.5	140.8	111.7	93.4	80.2	64.3	53.1	27.9

Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	578.4	533.5	468.1	370.2	300.6	229.5	185	156.4	136	110.7	92.7	49.9
1.80V/cell	658.6	592.2	514.5	402.8	325.5	247.3	198.7	167.9	145.5	118.3	98.8	52.6
1.75V/cell	683.2	611.5	529.8	413.8	333.6	252.8	202.9	171.2	148.1	120.2	100.2	53.3
1.70V/cell	720.5	629.8	545.5	425.2	342.5	258.9	207.3	174.6	150.9	122.1	101.6	53.9
1.67V/cell	733.2	640.7	554.2	431.3	347	262.1	209.6	176.4	152.4	123.2	102.4	54.3
1.60V/cell	740.4	666.6	575.7	446.8	358.8	270.2	215.5	181	156.1	125.7	104.3	55.2



TVL SERIES-VRLA Long Life Battery

TVL2-500 (2V500Ah)

APPLICATIONS

- Tele-communication central station (wired or cellular)
- Power system communication, military communication, etc
- Network communication including: data transmission, television signal transmission, etc
- Uninterruptable Power System (UPS-for Telecom)
- EPS

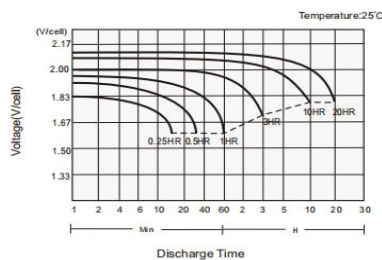
GENERAL FEATURES

- 16 years design life (25°C)
- Lead calcium alloy, sealed design, no watering required
- Puncture resistant micro-porous glass mat separators extend life
- Unique technology optimizes power capacity, cell consistency, and long-term reliability
- Designed for a wide range of applications

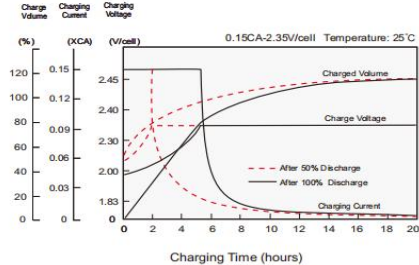
STANDARDS

- Compliance with IEC 60896 standards, EU Battery Directive
- UL,CE Approved
- Manufactured in ISO 45001, ISO 9001 and ISO 14001 certified production facilities

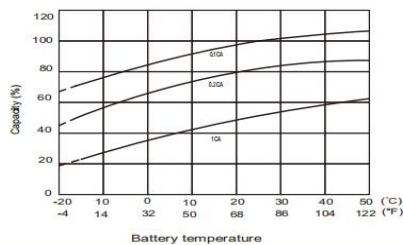
Discharge Characteristics



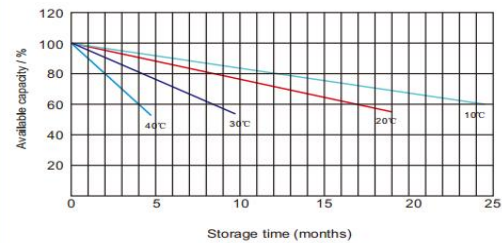
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



Suzhou ThinkVolt New Energy Co.,Ltd

www.cnthinkvolt.com

Data above is recommended and the picture is only for battery effect display, ThinkVolt reserves the final right of explanation.