Reserve Battery

Motorcycle Battery

#### **Energy Storage Battery-Tubular Flooded Technology-OPzS Series**

# **OPzS1500**

# (2V 1500Ah)

#### GENERAL FEATURES

- 20 years design life at floating condition
- Wide operating temperature range from -40°C to +60°C
- Tubular positive plate with prolonged cycle life
- Special filter and seal design ensure no acid mist overflow
- Excellent deep discharge recovery capability
- Flooded design, transparent containers, convenient to observe and replenish the lost water
- Low maintenance

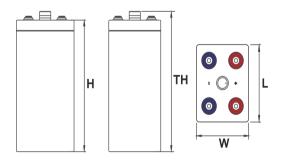
#### **Application**

- Renewable energy system
- Hybrid solar power system
- Uninterrupted Power Supply (UPS)
- Communications and electric equipment
- Emergency lighting equipment
- Fire alarm and security systems
- Control equipment, and other factory automation equipment
- Emergency power supply (EPS)
- Lighting equipment

#### Dimension

Unit:mm

Length 275±2mm / 10.83inch Width 210±2mm / 8.27inch Container Height 773±3mm / 30.43inch **Total Height** 828±3mm / 32.6inch







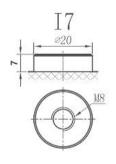




### **Terminal**

Unit:mm

**Terminal Type:** 



#### Weight

Without electrolyte

81.7kg 180lbs

With electrolyte

112kg 247lbs

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Tianneng Battery Group Co., Ltd. Changxing Tianying Import & Export Co., Ltd.

Motive Battery	Energy Storage Battery		
Reserve Battery	Motorcycle Battery	*	



**OPzS1500** 

Specificaion							
Nominal Voltage		2V					
Rated Capacity(25°C)		1596Ah 20hr Rate(1.80V/cell)					
		1500Ah 10hr Rate(1.80V/cell)					
		1278Ah 5hr Rate(1.75V/cell)					
		1129Ah 3hr Rate(1.70V/cell)					
		864Ah 1hr Rate(1.60V/cell)					
<b>Container Mate</b>	rial	SAN					
Operating	Discharge	-40 ~ +60°C					
Temperature	Charge	0 ~ +40°C					
Range	Storage	-20 ~ +40°C					
	40°C / 104°F	106%					
Capacity	25°C / 77°F	100%					
Effected by Temperature	0°C / 32°F	86%					
	-20°C / -4°F	60%					
	Float Voltage	2.23V/cell@25°C,Compensation Factor: -3mV/cell/°C					
<b>Charge Voltage</b>	Equalize Voltage	2.35 -2.40V/cell@25°C, Compensation Factor: -3mV/cell/°C					
	Cycle Voltage	2.40 -2.50V/cell@25°C, Compensation Factor: -5mV/cell℃					
Max Charging Current		300A (0.2C)					
Max. Discharge Current (5S)		9000A					
Internal Resistance		0.28mΩ					
4%, OPzS series stored at 25 ° C require a supplementary charge every  Self Discharge months, the charging interval would shrink when the ambient tempera higher							

## **Discharge Performance**

Constant Current Discharge Table (25°C/77°F) Unit: A								
F.V/Time	30min	1h	2h	3h	5h	8h	10h	20h
1.85V/cell	866	703	458	348	242	174	148	78.6
1.80V/cell	1030	757	482	359	250	179	150	79.8
1.75V/cell	1126	794	502	368	256	184	155	82.2
1.70V/cell	1169	818	515	376	260	187	157	83.4
1.65V/cell	1220	843	527	383	264	190	158	84.0
1.60V/cell	1261	864	539	389	267	191	159	84.6

Constant Power Discharge Table (25°C/77°F) Unit: W								
F.V/Time	30min	1h	2h	3h	5h	8h	10h	20h
1.85V/cell	2043	1406	953	724	485	359	296	157
1.80V/cell	2126	1511	990	761	498	368	309	164
1.75V/cell	2215	1602	1027	782	522	386	325	172
1.70V/cell	2308	1703	1057	803	541	393	332	176
1.65V/cell	2418	1818	1072	814	549	398	336	178
1.60V/cell	2553	1955	1078	820	553	401	338	179

Motive Battery

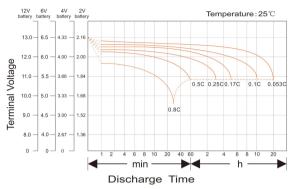
**Energy Storage Battery** 



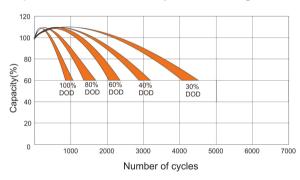
Reserve Battery

Motorcycle Battery

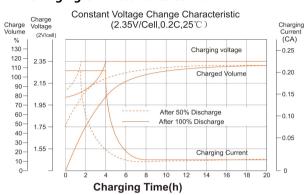
#### **Discharge Characteristics Curve**



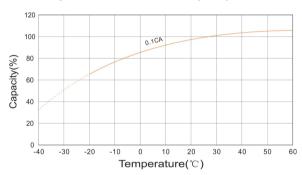
#### Cycle life in relation to depth of Discharge



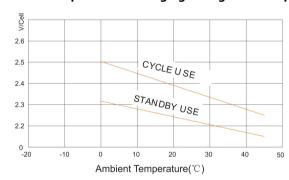
#### **Charging Characteristics Curve**



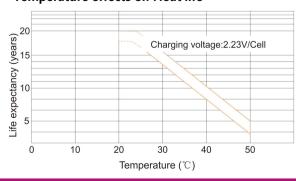
#### Temperature effects on Capacity



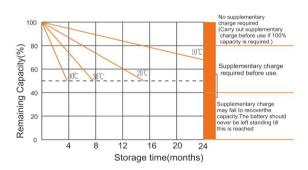
#### Relationship between charging voltage and temperature



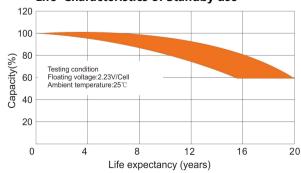
#### **Temperature effects on Float life**



#### **Self-discharge Characteristics**



#### Life Characteristics of Standby use



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V1.0

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