# 6-DZM-20(12V20Ah)

**E-Bike Battery** 

DZM series VRLA Gel Battery is specially designed for motive power applications including electric bikes/scooters, electric tricycles, electric motocycles and other device require DC power source. With international leading technologies and State-of-the-art automated manufacturing, DZM series offer long cycle life, large current discharge capability, high consistency, reliability and safety, and environmental-friendly.

### **Features and Benefits**

- Long Cycle Life: Exceptional cyclic performance above 600 cycles @80% DoD.
- · Reliable Seal Structure: Mount in any position except inverted
- Optimal Design: Besides the benefits of VRLA battery, it is maintainable that can prolong the service life by up to 50%-100% or more.
- Multi-purpose Application: The battery can be floating application as well as cyclic application.
- Low Self-discharge: Adopted high quality grid alloy and high purity electrolyte, low self-discharge and low water- loss.
- High Reliability and Safety: Adopted enhanced ABS container and special design safety valve to ensure battery high durable, safe and reliable.

# **Applications**

- Electric Bike / Scooters
- · Electric Tricycles
- Electric Tools and Toys
- · Mini Solar Power System

# **Product Specifications**

Nominal Voltage (V)	12 (6 cells per unit)
Nominal Capacity (25°C)	20 Ah @ 2HR-rate (to 1.75Vpc)
Dimension (mm)	L180mm x W76mm x H170mm
Approx. Weight	6.60 kg (14.55 lbs)
Terminal Type	Female Copper Insert M5
Internal Resistance	≤ 0.01 Ohm (fully charged)
Initial Charge Current	≤3. 0A
Self Discharge	Approx. 2.0% per month @ 20°C
Ambient Temperature	Discharge: -20~55°C Charge: -20~45°C Storage: -20~45°C
Float Charge Voltage	13.5~13.8V/block @25°C
Cycle Use Charge Voltage	14.7~14.9V/block @25°C
Container Material	ABS (UL94-V0 optional)

# G-DZM-20 G-DZM-









# **Complied standards**

- IEC 61056-1
- GB/T 22199
- GB/T 19639-1
- JIS C8702-1





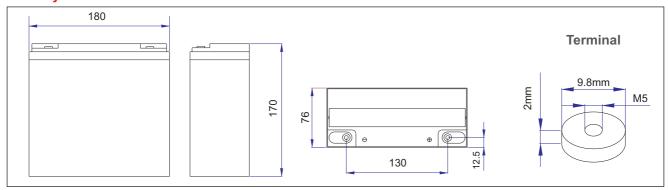
Optimized Structural Design High Quality Active Material





Typical Application

## **Battery Dimensions**

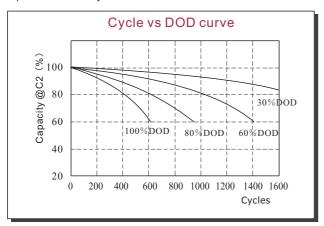


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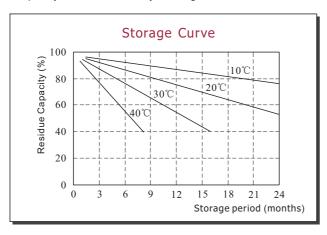
# **Cyclic Characteristics**

High cycle performance, up to 400 ~ 600 cycle at 100%DOD

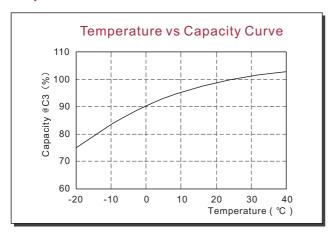


# **Self-Discharge Characteristics**

Capacity >90% after 90 days storage



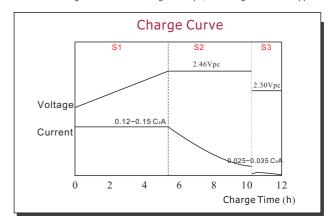
# **Temperature Characteristics**



# **Charge Characteristics**

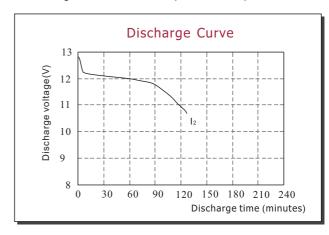
Recommend 3 Stage Charge Mode:

- S1: Charge with constant current 0.12C2A~0.15C2A to 2.46Vpc, then turn to step 2, S2: Charge with constant voltage 2.46Vpc to current drop to 0.03C2A, then turn to step 3,
- S3: Trickle charge with constant voltage 2.30Vpc, end charge as current approaches zero.



# **Discharge Characteristics**

Discharge current, DZM: I2A (on 12V block)



# **Open Circuit Voltage Characteristics**

