

**AN ISO 9001:2015 COMPANY** 



LIQUID COOLED Li-lon BATTERY MODULE WITH BMS

MODEL: GCDD252-75Ah-LiBM-Ch



**GROW CONTROL** is a research-driven power electronics company that delivers world-class innovations in energy systems. Our **Liquid-cooled Li-Ion Battery module with Battery Management System (BMS)** is a high-capacity energy storage assembly where individual battery cells are grouped into modules and cooled using a liquid coolant circulated through cooling plates or channels. The integrated BMS continuously monitors battery health by tracking voltage, current, temperature, and state of charge, and controls the liquid cooling system to maintain optimal thermal conditions, ensuring safe operation, maximizing battery lifespan, and enabling efficient fast charging.

### **Features**

- Faster Heat Transfer Rate
- More compact
- High discharge rate
- · Each Cell balancing and health monitoring
- · Over current, over voltage protection

### **Key Advantages**

- Efficient Thermal Management: Maintains batteries at optimal temperatures to enhance performance and longevity.
- Increased Safety: Reduces risk of thermal runaway by controlling heat precisely.
- Faster Charging: Enables rapid charging by managing heat effectively.
- Higher Energy Density: Compact design enabled by superior cooling.
- Better Battery Life: Uniform temperature and balanced cells minimize degradation.

#### **Applications**

- Grid-Scale Energy Storage
- Electric Vehicle Battery Packs
- Uninterruptible Power Supplies (UPS)
- Commercial & Industrial Energy Storage.

<sup>\*\*</sup> We customize our Liquid-cooled Li-Ion Battery module with Battery Management System (BMS) solutions according to customer specific requirements, ensuring the perfect fit for user application's capacity, type, cooling needs, and control features.



# **Technical Specification**

Model no	GCDD252-75Ah-LiBM-Ch
Battery Type	Li-ion
Each Cell capacity	75Ah
Nominal voltage	28V
Nominal capacity	2.5kWh(@25°C±2)
Efficiency	≥94%
Max. constant discharging current	10C
Nominal discharging current	75A
Range of operating voltage	20V~29V
Max. range of working temperature	Charging 0°C~55°C Discharging -30°C~55°C
Cooling	Liquid Cooling
Maximum working altitude	5000m
Cycle Life	8000
BMS Cell Voltage Range	2.5 V to 4.2 V per cell (Controls charging limits)
Cell Balancing Current	50 mA to 200 mA
Safety Features	Overvoltage, under voltage, over temperature protection



# **OUR CLIENTS**



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