

THUNDERBOLT 48ESS300



Li-ion battery pack for AGV and robots

- Electric vehicles
- Automation and robotics
- Rolling stocks
- Power industry
- Telecommunication
- Auxiliary back up system/UPS
- Mining
- Cold storage



Parameters

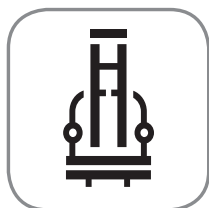
Nominal Parameters	
Nominal Voltage	51,8 V
Operating Voltage	42,0–58,8 V
Nominal Capacity	300 Ah / 420 Ah
Rated energy	15,54kWh / 21,76 kWh
Max discharge rate	450 A Continuous
Max Charge rate	450 A Continuous
Max pulse discharge rate	600 A
Energy density	77 Wh/kg
Number of cycles 80% DoD	>5000
SOC energy metering	<ul style="list-style-type: none"> • Based on advanced ICPT algorithms • Available via CAN interface
Date interface	CAN Bus
Operating conditions	
Ambient operating temperature	-20°C to +45°C continuous running
Humidity	<95% non–condensing
Protection class	IP 64
Mechanical Parameters	
Weight	203 kg
Mechanical interface	Permanent screwed-in lifting ears or threaded insert, located on the top of module
Insertion	Permanent screwed-in lifting ears
Construction	Steel
Power interface	Pig tail with APP SB350 connector
Safety	
Safe cell design	Li–ion cells with venting device
ICPT advanced BMS	ICPT BMS system with: <ul style="list-style-type: none"> • Excellent measurement precision • Galvanic isolation • Multi_level fault detecting system
Cells thermal management	Active auto self heating + thermal isolation
Internal protection	Contactors and Fuse inside

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