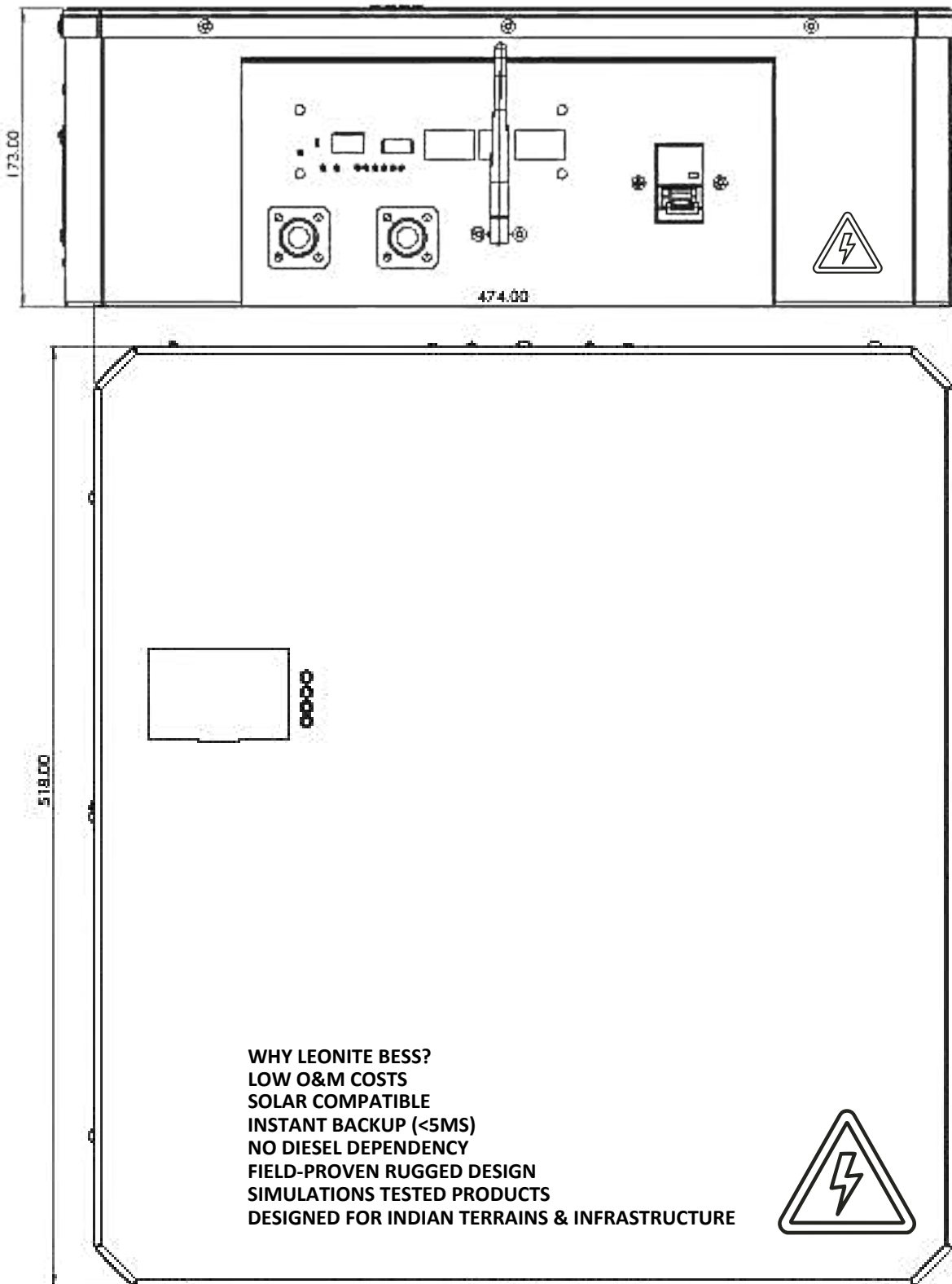
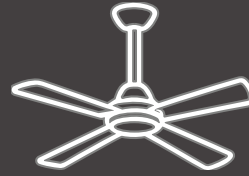


BESS / ESS POWER RACKS

LEONITE EPower 5100

For Residential ,Office & 1 BHK conventional backup units.



BESS / ESS POWER RACKS

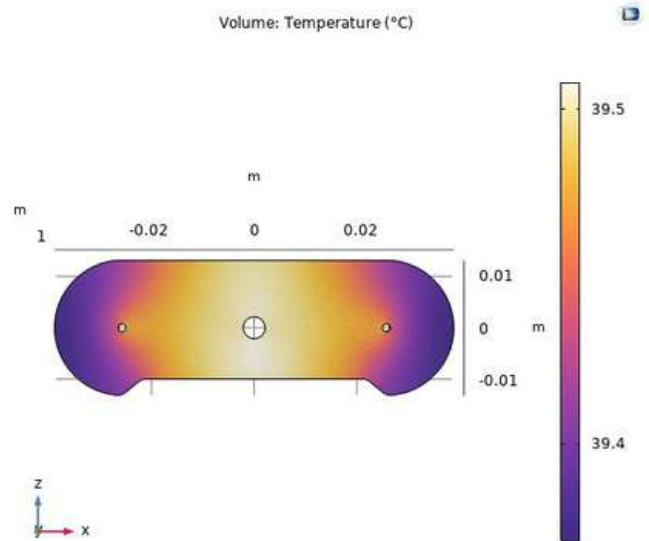
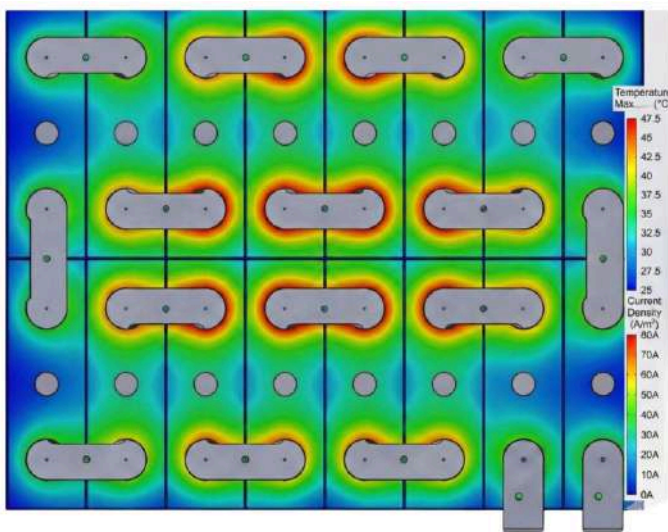
Leonite-BESS/ESS Power Racks Technical Specifications

System Technical Specifications	
Rated Voltage	51.2V DC
Energy Capacity Range	105Ah
Usable Energy (80%DOD)	4.350W
Balancing Type	Passive (upto 200mA)
Response Time	< 5 milliseconds (Sub-second switchover)
Battery Chemistry	LiFePO ₄ (Lithium Iron Phosphate) Other chemistries on request
Efficiency (Round Trip)	≥ 80%
Operating Temperature	-10°C to +55°C
Voltage range (locked as per safety)	42V - 58V DC
Environmental Rating	IP55 rated (Dust & Moisture Protection)
Environmental Specifications	
Discharge Temperature	-10 °C to 65 °C
Charge Temperature	0 °C to 55 °C
Storage Temperature	25 °C – 30 °C (90 days)
Humidity	5% – 95% RH
Voltage range (locked as per safety)	42V - 58V DC

Performance Specifications	
Peak Discharge Current	180 A @ 25 °C
Maximum Continuous Discharge Current	100 A @ 25 °C
Recommended Charge Current	20 A
Maximum Charge Current	50 A
Round-Trip Efficiency	Typical LiFePO ₄ (>95%)
Self-Discharge	< 3–5% per month
Cycle Life	*6000 cycles @ 25 °C, 0.5C, 90% DoD, 70% EOL
Protection & Safety	
Low Voltage Disconnect	44 V ±1 V
High Voltage Disconnect	58 V ±1 V
Short-Circuit Protection	100–300 μs
Built-in Protections	Over-charge, Over-discharge, Over-current, Short-circuit, Over-temperature
Safety Standards	UN38.3, MSDS



Mechanical Specifications	
Dimensions (L x W x H)	518 x 474 x 173 mm
Weight	~45 kg
Terminal Type	M6
Mounting	Cabinet / Rack (customizable)
Communication & Control	
Communication Interfaces	CAN, RS-485, UART
Wireless	Bluetooth
Smart BMS	Yes (Inverter-protocol dependent)
Parallel / Series Expansion	Supported



CUSTOMER RESPONSIBILITIES

Keep warranty card and proof of original installation date readily available for warranty claim verification. Ensure all service and repairs are performed by LEONITE or authorized agents only. Adhere to recommended maintenance schedules and operational guidelines provided in the LEONITE user manual.

CONTACT & SUPPORT

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