

PowerStack



Datasheet

Battery System Characteristics

Cell Chemistry:	Lithium Iron Phosphate
Cooling of battery strings:	Forced Air
Temp. range for battery room:	15°C to 25°C
Vibration:	IEC 60068-2-6
EMC:	IEC 60945, IEC 61000-4, CISPR 16-2-1, 16-2-3
C-rate peak disch./charge	1 C
C-rate cont. disch./charge	0,6 C

Battery module

Battery capacity per module:	8.9 kWh
Short circuit capacity (min/max):	3946 A/5333 A
Voltage range of battery module:	
Minimum (0% SOC):	46.4 VDC
Nominal:	51.2 VDC
Maximum (100% SOC):	55.4 VDC
Maximum charging voltage:	57.6 VDC
Maximum continuous current:	175 A
Height:	144 mm
Width:	500 mm
Depth:	954 mm (including cover)
Weight:	87 kg
Enclosure protection class:	≥IP65

Battery String Characteristics (for 20 modules)

Battery modules in series:	Max 20
Battery capacity per string:	179 kWh
Voltage range of battery string:	
Minimum (0% SOC):	928 VDC
Nominal:	1024 VDC
Maximum (100% SOC):	1108 VDC
Maximum charging voltage:	1152 VDC
Maximum continuous current:	175 A

Automation cabinet

Height:	500 mm
Width:	500 mm
Depth:	300 mm
Weight:	23 kg
Protection class:	IP66
Communication interface:	1 x Modbus TCP
Alarm / Status interface:	1 x NC contact, Pot. Free
Local control:	3 x push buttons/LEDs
Local Display (option):	7" screen for indication
Power supply:	24 VDC

Power Distribution unit

Amount of PDU:	1 per string
Height:	144 mm
Width:	500 mm
Depth:	954 mm (including cover)
Weight:	33,5 kg
Protection class:	≥IP65
Maximum inductive load:	27 µH

Base Frame

Height:	150 mm
Width:	500 mm
Depth:	954 mm (including cover)
Weight:	16,5 kg
Protection class:	≥IP65

Features and Benefits

- Very safe cell chemistry
- Chip-on-cell monitoring
- Near field wireless cell data acquisition
- Cell to cell thermal runaway protection
- Robust casing
- Flexible and modular design
- Easy to service and maintain
- Low installation and commissioning time
- Enhanced EMI/EMC immunity design for maritime
- Cobalt and nickel free
- Remote monitoring capabilities
- DNV GL, EN 62619 / 62620 and UN 38.3 tests

Applications and Markets

- Grid storage
- Port infrastructure
- Fish farms
- Hybrid and electric ships