BORDLINE® Max 500-HP
High power battery for transportation

BORDLINE® ESS is an energy storage system designed for transportation applications and meets demanding requirements of rail, electric bus, and off-road vehicles.

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Key characteristics

Safe

- HIGHEST SAFETY
  By design and cell selection

- LONG LIFE
  Over 20,000 cycles

- RAPID CHARGING
  Charging in less than 10 min

Plug & play

EASY

CONNECTIVITY
Simple installation

Flexible

- MULTI-STRING PARALLELING
  To adapt capacity

- LOW-TEMPERATURE OPERATION
  Excellent performance

- BATTERY MANAGEMENT SYSTEM
  Integrated supervision

- COMPACT AND LIGHT-WEIGHT
  Designed for all applications
Technical data

Rating
Nominal energy 20.3 kWh
Nominal voltage 442 V
Charge cut-off voltage 518 V
Discharge cut-off voltage 288 V
Peak power charge / discharge up to 200 kW / 175 kW
Continuous power charge / discharge typical 85 kW

Cooling
Coolant water-glycol

Mechanical data
Dimensions L1370 x H490 x W490 mm
Weight 340 ± 10 kg
Mounting location roof/underslung
Degree of protection (EN 60529) IP66/IP69

Ambient conditions
Ambient temperature -40 °C to + 45 °C

Lifetime
Lifetime up to 15 years
Cycle life at 35 °C, 10-90 % SoC, 2C/2C >20.000

Tested and certified
IEC 62928, ECE R100, UN 38.3, EN 45545, IEC 62619, IEC 62620

Charge/discharge characteristics

Voltage, V

SOC, 1

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