BORDLINE® Max 700-UHP
Ultra high power battery for transportation

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

Key characteristics

Safe
HIGHEST SAFETY
By design and cell selection

>40,000
LONG LIFE
Over 40,000 cycles

80%
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: 24.3 kWh
- Nominal voltage: 607 V
- Charge cut-off voltage: 713 V
- Discharge cut-off voltage: 396 V
- Peak power charge / discharge: up to 275 kW / 240 kW
- Continuous power charge / discharge: typical 120 kW

Cooling
- Coolant: water-glycol

Mechanical data
- Dimensions: L1750 x H490 x W490 mm
- Weight: 450 ± 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, 3C/3C: >40,000

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

Charge/discharge characteristics

Voltage, V

![Graph showing charge/discharge characteristics with SOC along the x-axis and voltage along the y-axis.](image-url)