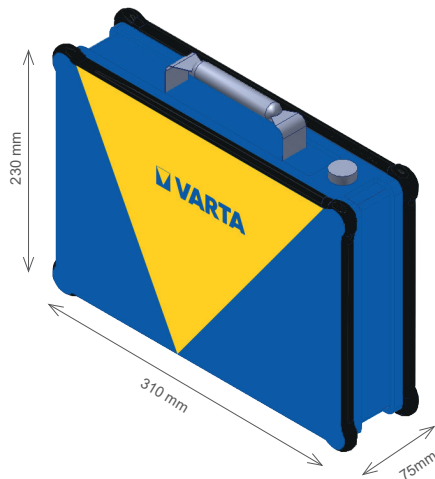


48 V | 20 Ah nominal | 1013 Wh



APPLICATIONS

For low speed electric vehicles (LSEV):
Autonomous robots
Floor Cleaners / Scrubbers
Material Handling AMRs and AGVs

GENERAL (Battery with safety circuit and plastic housing)

Size (l x w x h) in mm	230 x 75 x 310
Cell	Li Ion (NMC)
Circuit	Protection and fuel-gauging
Communications	CAN-Bus, SOC display, 12 V for system demand (20 W)
Weight	< 6.1 kg

ELECTRICAL SPECIFICATION

Nominal voltage	48 V
Rated capacity	20 Ah nominal
Watt-hour rating	1013 Wh
Charging method	Constant current + constant voltage
Max. charge voltage	58.8 V
Max. continuous charge current	4 A
Rec. charge cut off	< 1.0 A
Max. continuous discharge current	20 A
Rec. discharge cut off	42 V
Internal impedance	Approx. 150 mΩ
Exp. cycle life at (1.0 C / 1.0 C), 23 °C ± 5 °C	≥ 500 cycles ≥ 70 %

CELL & BATTERY PROTECTION

Overcharge detection	4.35 V based on single cell
Overdischarge detection	2.9 V based on single cell
Overcurrent detection	25 A

ENVIRONMENTAL CONDITIONS

Charge	0 °C to +45 °C
Discharge	-20 °C to +60 °C
Storage	1 month at -20 °C to +60 °C ≥ 80 % 3 months at -20 °C to +45 °C ≥ 80 % 1 year at -20 °C to +23 °C ≥ 80 %
Humidity	0 to 65 RH %

SAFETY CERTIFICATIONS

Please follow VARTA handling and safety precautions for Lilon & LiPolymer.
The cell used is a UL recognized component according to UL1642.
The battery meets the requirements of battery directives and the battery parts are RoHS-compliant.