

DATASHEET - Eroller 6



DIMENSIONS and WEIGHT

Vehicle size

L = 1.050 mm
W = 600 mm
H = 900 mm

Equipment

Powered roller	
Roller plane size	Depending on the payload
Rollers	Depending on the payload

**Vehicle weight
w/o batteries**

85 kg

PAYLOAD and REQUIREMENTS

Nominal payload 100% deliveries	300 kg
Maximum payload 30% deliveries	350 kg
Payload max size	L = 800 mm
	W = 600 mm
	H = 1.000 mm
Center of gravity footprint	L = 650 mm
	W = 530 mm
Center of gravity height	H = 700 mm

PERFORMANCE

Kinematics and Drive	Differential bidirectional
Speed	0,1 m/s min
	1,0 m/s max
X, Y accuracy	+/- 10 mm
θ accuracy	+/- 1°
Localization rate	5 Hz
Minimum bending radius	0 m; the vehicle turns on its vertical axis
Slope	5% (2,9°)
Slope min bending radius	15 m
Step	±5 mm
Gap	10 mm
Motor wheel power	2x200 W
Braking torque	2x2 Nm

MATERIALS

Wheels coating	Polyurethane
Chassis material	AISI 304
Shell material	Painted Steel

BATTERY

Battery	LiFePO4 24V 50 Ah
Depth of discharge	70%
Autonomy	6 h
Recharging time	2 h
Battery weight	13 kg
Battery cycle life	2.000 cycles

COMMUNICATION

Communication	WI-FI - WLAN 802.11a/b/g/n - 2,4/5 GHz
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SAFETY

Safety devices

- Nr. 2 Sick S300 laser scanners
- N.2 E-stop buttons
- Safety control central unit Sick Flexi

Performance Level	c
Safety field shape	360°

NAVIGATION

Navigation Odometric closed loop via laser scanner (natural navigation)

Mapping Auto acquisition by Mobile Robot

ENVIRONMENT

Temperature from +5 to 35 °C

Working relative humidity from 30% to 80% (absence of condensation)

IP degree 13

REGULATIONS

Regulations

- 2006/42/EC Machinery Directive
- 2014/35/EU Low Voltage Directive
- 2014/30/EU Electromagnetic Compatibility Directive
- ISO 3691-4: 2020 Safety of driverless industrial trucks