

DATASHEET - Ecart 8



DIMENSIONS and WEIGHT

Vehicle size	L = 1.660 mm
	W = 600 mm
	H = 350 mm

Equipment	Lift platform	
	Plane size	L = 1.364 mm
		W = 600 mm
Stroke	80 mm	

Vehicle weight w/o batteries	315 kg
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PAYLOAD and REQUIREMENTS

Nominal payload 100% deliveries	500 kg
Maximum payload 30% deliveries	600 kg
Payload max size	L = 1.400 mm
	W = 900 mm
	H = 1.500 mm
Center of gravity footprint	L = 1.500 mm
	W = 360 mm
Center of gravity height	H = 800 mm
Min load frame clearance	W = 665 mm
	H = 365 mm

PERFORMANCE

Kinematics and Drive	Bidirectional
Speed	0,1 m/s min
	1,4 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	10% (5,7°)
Slope min bending radius	10 m
Step	±5 mm
Gap	15 mm
Motor wheel power	2x700 W Brushed
Braking torque	2x10 Nm

MATERIALS

Wheels coating	Polyurethane
Chassis material	AISI 304
Shell material	AISI 304

BATTERY

Battery	Lithium-Nichel-Manganese-Cobalt-Oxide 2x 24V 64 Ah
Depth of discharge	70%
Autonomy	10 h
Recharging time	2,5 h
Battery weight	2x10 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	<p>Nr. 2 Sick S300 laser scanners (PLd) Sensitive board (front/rear) N.2 E-stop buttons N. 3 - 3D cameras for safeguarding above the laser scanners Scan Grid2 for page protection Safety control central unit Sick Flexi (PLe)</p>
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Performance Level	c
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Safety field shape	<p>Boxes 360° Trolleys 180°+180° Front/Rear</p>
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NAVIGATION

Navigation	Odometric closed loop via laser scanner (natural navigation)
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Mapping	Auto acquisition by Mobile Robot
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ENVIRONMENT

Temperature	from +5 to 35 °C
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Working relative humidity	from 30% to 80% (absence of condensation)
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IP degree	13
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REGULATIONS

Regulations	<ul style="list-style-type: none"> • 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
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