

DATASHEET - Ecart 4



DIMENSIONS and WEIGHT

Vehicle size
L = 1.450 mm
W = 820 mm
H = 350 mm

Equipment
Lift platform
Plane size Depending on the payload
Stroke Depending on the payload

**Vehicle weight
w/o batteries**
400 kg

PAYLOAD and REQUIREMENTS

Nominal payload 100% deliveries	1.200 kg
Maximum payload 30% deliveries	1.500 kg
Payload max size	L = 1.200 mm
	W = 1.200 mm
	H = 1.200 mm
Center of gravity footprint	L = 860 mm
	W = 700 mm
Center of gravity height	H = 800 mm
Min load frame clearance	W = 1.050 mm
	H = 395 mm

PERFORMANCE

Kinematics and Drive	Differential, bidirectional
Speed	0,1 m/s min
	1,8 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	3% (1,7°)
Slope min bending radius	15 m
Step	±5 mm
Gap	10 mm
Motor wheel power	2x1500 W
Braking torque	2x10 Nm

MATERIALS

Wheels coating	Polyurethane grip + Vulkollan®
Chassis material	AISI 304
Shell material	Painted Steel

BATTERY

Battery	LiFePO4 24V 100 Ah
Depth of discharge	70%
Autonomy	7 h
Recharging time	1 h
Battery weight	138 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 Sensitive board (front/rear) N.2 E-stop buttons Safety control central unit Sick Flexi
Performance Level	d
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	<ul style="list-style-type: none">• 2006/42/EC Machinery Directive
	<ul style="list-style-type: none">• 2014/35/EU Low Voltage Directive
	<ul style="list-style-type: none">• 2014/30/EU Electromagnetic Compatibility Directive
	<ul style="list-style-type: none">• ISO 3691-4: 2020 Safety of driverless industrial trucks