

**DATASHEET - Ecabinet 3**



**DIMENSIONS and WEIGHT**

**Vehicle size**  
L = 1.058 mm  
W = 625 mm  
H = 1.545 mm

2-door cabinet double access

**Equipment**  
Inside size  
L = 610 mm  
W = 415 mm  
H = 840 mm

Lock Electric

Drawers size 600 x 400 mm

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

## PAYLOAD and REQUIREMENTS

Nominal payload 100% deliveries	300 kg
Maximum payload 20% deliveries	350 kg
Center of gravity footprint	L = 600 mm W = 400 mm
Center of gravity height	H = 600 mm

## PERFORMANCE

Kinematics and Drive	Diamond, bidirectional
Speed	0,1 m/s min 1,0 m/s max
X, Y accuracy	+/- 10 mm
$\theta$ 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	1x300 W
Braking torque	1x4 Nm

## MATERIALS

Wheels coating	Polyurethane grip
Chassis material	AISI 304
Shell material	Painted Steel

## BATTERY

Battery	LiFePO4 24V 60 Ah	PureLead 24V 60 Ah
Depth of discharge	70%	40%
Autonomy	6 h	4 h
Recharging time	2 h	3 h
Battery weight	21 kg	38 kg
Battery cycle life	2.000 cycles	1.200 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 Nr. 2 Sick TIM361S laser scanners Sensitive board (front/rear) 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