

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 |
|---------------|--|

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

- 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