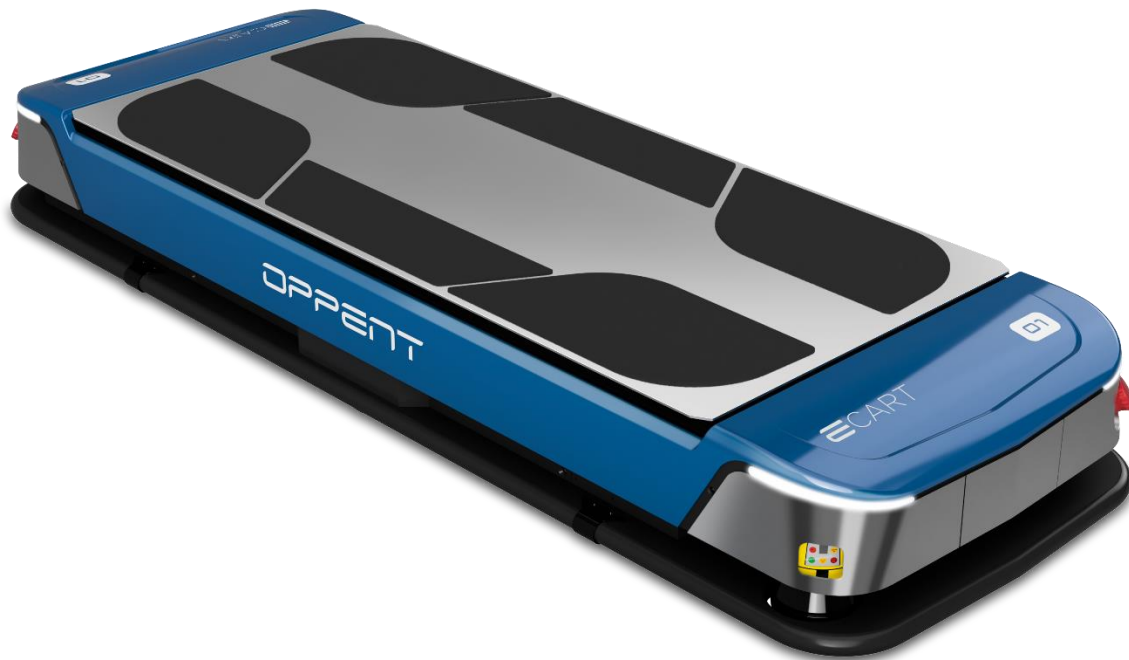


DATASHEET - Ecart 5



DIMENSIONS and WEIGHT

Vehicle size
L = 1.600 mm
W = 560 mm
H = 230 mm

Equipment
Lift platform
Plane size L = 1.160 mm
W = 500 mm
Stroke 60 mm

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

PAYLOAD and REQUIREMENTS

| | |
|------------------------------------|--------------|
| Nominal payload 100% deliveries | 400 kg |
| Maximum payload 30% deliveries | 500 kg |
| Payload max size | L = 1.550 mm |
| | W = 800 mm |
| | H = 1.500 mm |
| Center of gravity footprint | L = 820 mm |
| | W = 460 mm |
| Center of gravity height | H = 600 mm |
| Min load frame clearance | W = 620 mm |
| | H = 245 mm |

PERFORMANCE

| | |
|--------------------------|---|
| Kinematics and Drive | Diamond, 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 | 3% (1,7°) |
| Slope min bending radius | 15 m |
| Step | ±5 mm |
| Gap | 10 mm |
| Motor wheel power | 2x600 W |
| Braking torque | 2x5 Nm |

MATERIALS

| | |
|------------------|-------------------|
| Wheels coating | Polyurethane grip |
| Chassis material | AISI 304 |
| Shell material | E-Glass |

BATTERY

| | |
|--------------------|-------------------|
| Battery | LiFePO4 24V 50 Ah |
| Depth of discharge | 70% |
| Autonomy | 5 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 |
|---------------|--|

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 | c |
| Safety field shape | Boxes: 360° Trolleys: 180° front + 180° rear |

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 |