

plato

ALDEBARAN

Embedded Screen

(10.1 inch touchscreen)
To get orders from staff by touch and to show facial expressions

Sensors

3 x depth sensors, lasers class 1 and infrared to map the location and detect objects.

LIDAR

Certified PL b 220° light detection and ranging to measure distances and avoid collision.

Emergency Stop Button

Certified PL d, to stop manually the robot in case of unexpected behaviour.

Speakers

(1W)
To communicate and greet while fulfilling the orders.

LED Lights

(360° view)
Different colors for indication of different status.

Bumper

Certified PL c, to stop the robot in case of minor frontal collision.

Total max capacity: 30kg

Top Shelf

10kg weight sensor

Mid Shelf

10kg weight sensor

Bottom Shelf

20kg weight sensor

Top Button

To skip or to go home

Two side Buttons

To pause and resume

Power Button

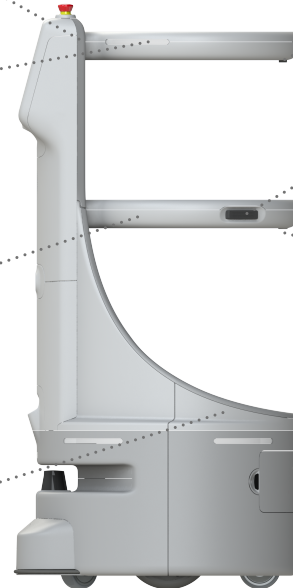
Manual/Automatic Mode Button

Energy

Removable Battery & charger hatches



500 mm



545 mm



1113 mm



Certification & Technical specifications



Plato is compliant with:
RoHS (Restriction of hazardous substances in electrical and electronic equipment).
WEEE (Waste Electronic and Electrical Equipment).

Product safety

Machinery directive

ISO 12100 & ISO 13849 & IEC 60204-1 & ISO 13482 - Risk Assessment & Design

ISO 13482: Safety standard for mobile robot
 ISO 13849: Requirements of safety functions.



Plato includes
 • Collision avoidance: PL b
 • Bumper: PL c
 • Emergency stop: PL d
 • Overspeed: PL d

Product EMC

EMC directive

CISPR 14 & CISPR 32 & CISPR 35
 IEC 61000-6-1
 IEC 61000-6-3

Radio certification

Radio equipment directive (RED)

Certification for Wifi and radio emission

IP42

IP42

Protection class indoor

Protection against tools and small wires larger than 1 mm.
 Protection against water spray in vertical position (max 15°)

Charger safety

Low voltage directive

IEC 60204-1 and IEC 60335-1 & IEC 62368-1

Battery safety

VARTA manufacturer certification

IEC 62133-2:2017
 ISO 13849: PL c for protection of deeply discharged secondary cells

Food contact

CAMBRO Round tray

Certification for removable tray



| | | |
|-----------------------------|--|--|
| Weight & Payload | Robot empty weight including battery | 53 kg |
| | Max combined Payload: 30 kg | Top Shelf: 10 kg Middle shelf: 10 kg Bottom shelf: 20 kg |
| Dimensions | Length | 545.5 mm |
| | Width | 500 mm |
| | Height | 1113.1 mm |
| Working environment | Operating temperature | 5°C - 40°C |
| | Operating humidity | 20% - 85% non-condensing |
| | Max mapping area | < 300 m ² / 3220 square feet |
| | Max environment noise for voice commands | 75 dB |
| Storage conditions | Storage temperature | -10°C to +60°C |
| | Storage humidity | 90% max non-condensing |
| Navigation | Max speed | 2.6 km/h (0.7m/s) |
| | Minimum space Width | Corridor or door must be minimum 65-70 cm width |
| | Slope | No (0° +/- 0.5°) |
| | Gap crossing | No gap allowed |
| | Obstacle step | No step allowed |
| Power | Input voltage | 30 VDC |
| | Input current | 8 A |
| Charger | Input voltage | 100 - 250 VAC |
| | Input frequency | 50 - 60 Hz |
| | Charging cable length | 1850 mm (72.8 in) |
| Battery | Model | Varta 7S12P |
| | Type | Ion-Lithium |
| | Energy | 38.4 Ah / 995 Wh |
| | Average charging time | 7 hours 30 minutes (0>100%) |
| | Discharging time | 12h depending on use |
| Radio module | Protocols | Wi-Fi 802.11n/ac 2X2 MU-MIMO 2.4GHz/5GHz |

Legal mentions from Manufacturer: Aldebaran reserves the right to make any changes to the Product and its documentation without prior notice or correction to the User.
 Please check the latest version at the following address: www.aldebaran.com