

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 PLB 220° light detection and ranging to measure distances and avoid collision.



500 mm

Emergency Stop Button
To stop unexpected behaviour

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

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

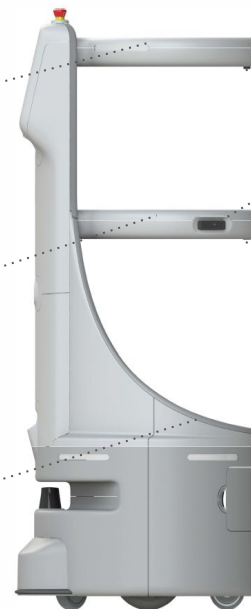
Bumper
To absorb impact in a minor collision and stop the robot if need be

Total max capacity: 30kg

Top Shelf
10kg weight sensor

Mid Shelf
10kg weight sensor

Bottom Shelf
20kg weight sensor



545 mm

Top Button
To skip or to go home

Two side Buttons
To pause and resume

Power Button

Manual/Automatic Mode Button

Energy
Battery & charger hatches

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).

These robots typically perform tasks to improve the quality of life of intended users, irrespective of age or capability. It describes hazards associated with the use of these robots, and provides requirements to eliminate, or reduce, the risks associated with these hazards to an acceptable level
www.iso.org/standard/53820.html

Product safety	Machinery directive	ISO 12100 & ISO 13849 & IEC 60204-1 & ISO 13482 - Risk Assessment & Design
Product EMC	EMC directive	CISPR 14 & CISPR 32 & CISPR 35 IEC 61000-6-1 IEC 61000-6-3
Radio certification	Radio equipment directive	Certification for Wifi and radio emission
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 60335-2-29
Battery safety	VARTA manufacturer certification	IEC 62133-2:2017
Food contact	CAMBRO Round tray	Certification for removable tray

IP42



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	10 mm max
	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 7512P
	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	802.11n/ac 2X2 MU-MIMO 2.4GHz/5GHz WiFi & Bluetooth Low Energy 5.x