

Co-Lab

Indoor Security Robot



KABAM

ROBOTICS

PRODUCT OVERVIEW

Co-Lab is an indoor robot with surveillance, data collection & advanced video analytics capabilities.

It navigates autonomously & safely around its environment via its extensive sensors array. Providing up to 8 hours of run-time with just 2 hours of charging & public announcements features, Co-Lab is designed to provide 24/7 safety & surveillance.

Equipped with lift integration, smart access-doors integration & site-maps sharing capabilities allows Co-Lab to travel autonomously & access various floors in a building.

Featuring a 2-metre telescopic camera positioned on an extendable boom arm gives Co-Lab a complete 360-degree visibility of its surroundings, capturing an extensive amount of information for comprehensive surveillance & analytics. In addition, its interactive screen allows users to access various directories & concierge functions.

Complete with an easy-to-use mission control interface, Co-Lab is your perfect surveillance partner & an essential member of your security team.

FUNCTIONS/FEATURES

- Autonomous Navigation System
- Battery Life (≤ 8 hours*)
- Safety Sensors for Obstacle Avoidance (Static and Dynamic)
- Self-Recharging Capabilities
- Extendable (up to 2 metres) Telescopic Camera for Elevated View
- 360-degree Video Streaming

**Subject to specifications*

SMART+

LIVE OBSERVABILITY TOOLS

- Camera Feeds
- Lidar Feeds
- Health Data/ Metrics

OVER-THE-AIR INTERVENTION CAPABILITIES

- Remote Cockpit

TASK MANAGEMENT

- Scheduled and Ad-hoc Patrol Execution

REAL-TIME SYSTEM ALERTS

STATE-OF-THE ART USER INTERFACE

ADVANCED VIDEO ANALYTICS DETECTING UNATTENDED OBJECTS, OVERFLOWING BINS AND FAULTY LIGHTS

PRODUCT SPECIFICATION



TOP VIEW

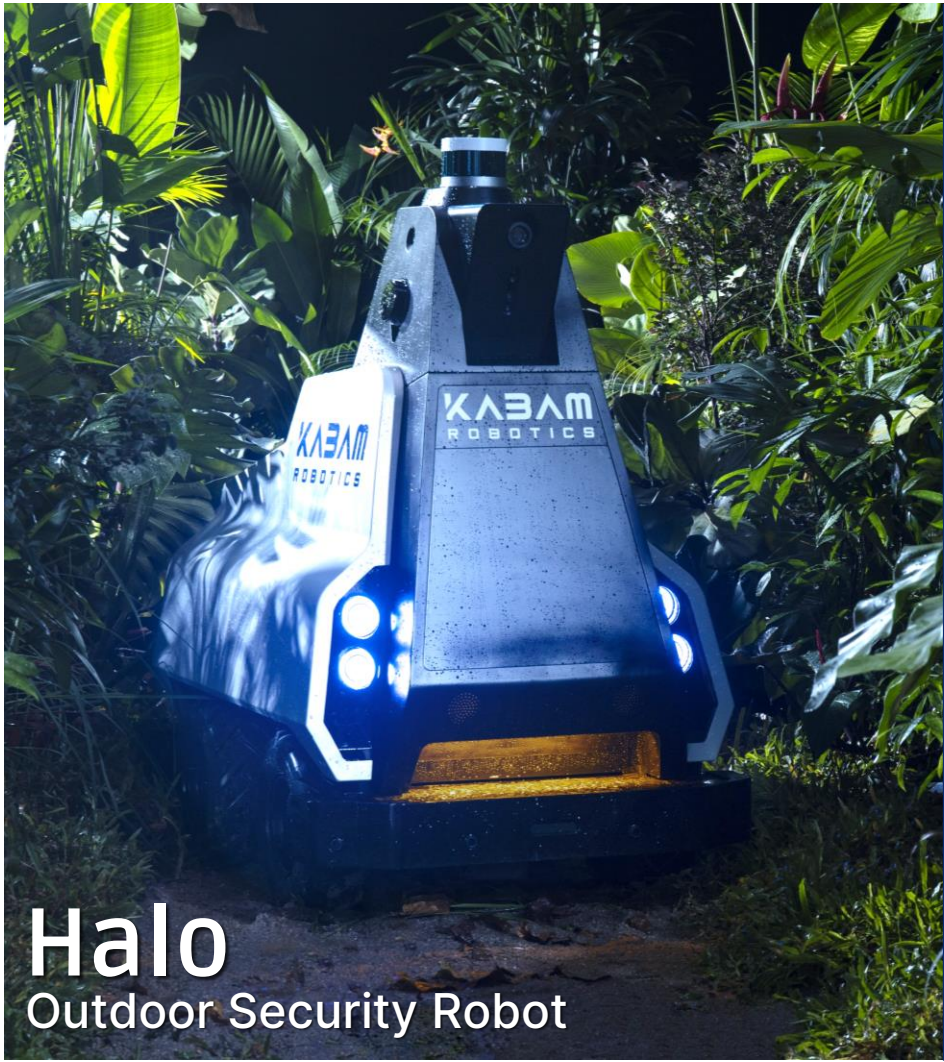


DESCRIPTION

PARAMETRES

Diameter	500mm ± 10mm
Height	Without Extended Telescopic : 1500mm (± 10mm) With Extended Telescopic : 2000mm (± 10mm)
Weight	80kg
LIDAR Maximum Scan Radius (On the surface with a 90% reflective rate)	25 metres
Ultrasonic Sensor	6 (Maximum Detecting Distance: 50cm)
Depth Camera	3
Cliff Sensor	3 (Minimum Detecting Depth: 5cm)
Pressure Bumper	1
Mapping Performance	Maximum Mapping Area : 500m x 500m Map Definition : 5cm
Speed	0.3 – 0.7m/s
Hardware Interface	Ethernet : 10/100/1000 Mbps Power : DC 20-25.2V 5A Max Wi-Fi : 5G & 2.4G 802.11a/b/g/n/ac
Software Interface	Smart+
Working Hours	≤ 8 hours*
Battery Capacity & Type	24V 32AH (18650 Li-Ion)
Autonomous Recharging	Charging Station Input : 100 – 240 VAC (250W) Output : 25.2V 6A-10A Max Charging Time : 3 – 5 hours
Operating Environment	0°c – 40°c
Network	4G Enabled with Wi-Fi Access

*Subject to specifications



KABAM ROBOTICS

Halo

Outdoor Security Robot

PRODUCT OVERVIEW

Experience the future of security and surveillance with Halo, the ultimate choice for outdoor security inspection.

Halo operates seamlessly with its comprehensive sensor array for precise navigation and optimal performance. With a robust all-terrain drive system, Halo effortlessly traverse through rugged and uneven landscapes, showcasing remarkable adaptability and resilience.

Halo's weather-resistant shell guarantees uninterrupted operation in various weather conditions, including rain, wind, and high temperatures.

Featuring a complete 360-degree field of view, Halo captures extensive information for comprehensive surveillance and sophisticated analytics. Equipped with sirens and strobe lights, Halo creates heightened visibility and a commanding surveillance presence.

FUNCTIONS/FEATURES

- Autonomous Navigation System
- Battery Life (6 – 8 hours*)
- Safety Sensors for Obstacle Avoidance
(Static and Dynamic)
- Self-Recharging Capabilities
- 360-degree Video Streaming

**Subject to specifications*

SMART+

LIVE OBSERVABILITY TOOLS

- Camera Feeds
- Lidar Feeds
- Health Data/ Metrics

OVER-THE-AIR INTERVENTION CAPABILITIES

- Remote Cockpit

TASK MANAGEMENT

- Scheduled and Ad-hoc Patrol Execution

REAL-TIME SYSTEM ALERTS

STATE-OF-THE ART USER INTERFACE

ADVANCED VIDEO ANALYTICS DETECTING UNATTENDED OBJECTS, OVERFLOWING BINS AND FAULTY LIGHTS

PRODUCT SPECIFICATION



SECURITY & SURVEILLANCE,
FACILITY INSPECTION

PA SYSTEM/
FCC ALERT

AUTONOMOUS DOCKING &
WIRELESS CHARGING

IP55 RATED

AUTOMATED
DISTURBANCE
RESPONSES



FRONT VIEW



BACK VIEW

TOP VIEW



SIDE VIEW

BACK VIEW



FRONT VIEW

DESCRIPTION

PARAMETRES

Dimension (L x W X H)	1167mm x 760mm x 1300mm
Weight	115kg
IP Protection	IP55
Camera	4 x 5MP, 2.8mm focal length (360° visibility, low-light vision*) 1 x downward-facing depth camera 1 x rear-facing depth camera
Speaker	2 x 30 Watts (86 dB)
Drive	4 Wheel Drive (Differential Steering)
Ground Clearance	120mm
Climbing Ability	< 15 degrees
Turning Radius	0 (Robot is able to turn on a pivot)
Battery	25V, 60AH
Operations Hour Per Full Charge	6 – 8 hours**
Charging Time	~ 3 hours
Operation Environment	-10°C - 45°C
RC Transmitter	2.4G/ extreme distance 1km
Speed	Up to 1.5m/s
Thermal Sensors (optional)	Spectral Range: Longwave infrared, 8µm to 14µm Effective Frame Rate: 8.7 Hz Thermal Sensitivity: <50 mK (0.050° C)
Smoke Sensors (optional)	Sensitivity: 0.08-0.2 db/m
Screen (optional)	13.7" Android Tablet Computer (IP65)
Battery Upgrade (optional)	25V, 90 or 120 AH

*0.0001Lux @ (F1.2,AGC ON), 0 Lux with IR
**Subject to specifications



Contact : +65 6257 8122
Email : info@kabam.ai
Website : www.kabam.ai
Address : 54 Serangoon North Avenue 4, #05-01, Singapore 555854