www.qltyss.com

#### Showcasing Our

## Robotic Solutions



**QUALITY SUPPORT SOLUTIONS** 







Building the future

#### TERMINUS 特斯联

#### Exclusive Partners for world class brands.





**Unitree**Robotics



TERMINUS 特斯联







## Delivery Robots

## Titan Delivery Robot

Outdoor Delivery



Building the future

#### Titan Delivery Robot

- Navigating Performance and Autonomy
- Easy Maintenance
- Advertising
- Efficient Delivery
- Flexible Configuration
- State of the Art Chassis
- Autonomous Recharging
- Secure Compartment
- Interactive Touch Screen

Titan Delivery's high-performance chassis is highly capable of autonomous navigation in any environment. Equipped with a precise 3D LIDAR, and an array of sensors for collision and fall avoidance, the Titan deliver chassis guarantees accurate navigation and route planning.



## X1 Delivery Robot

Indoor Delivery

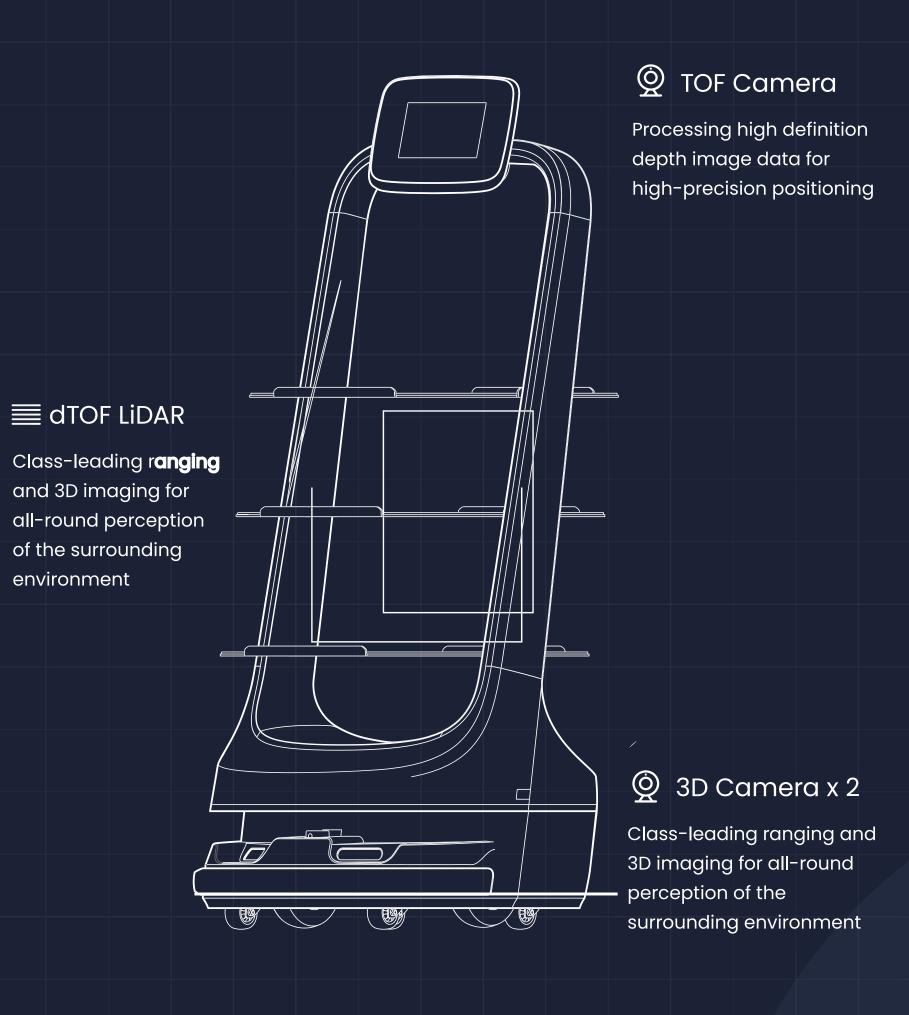


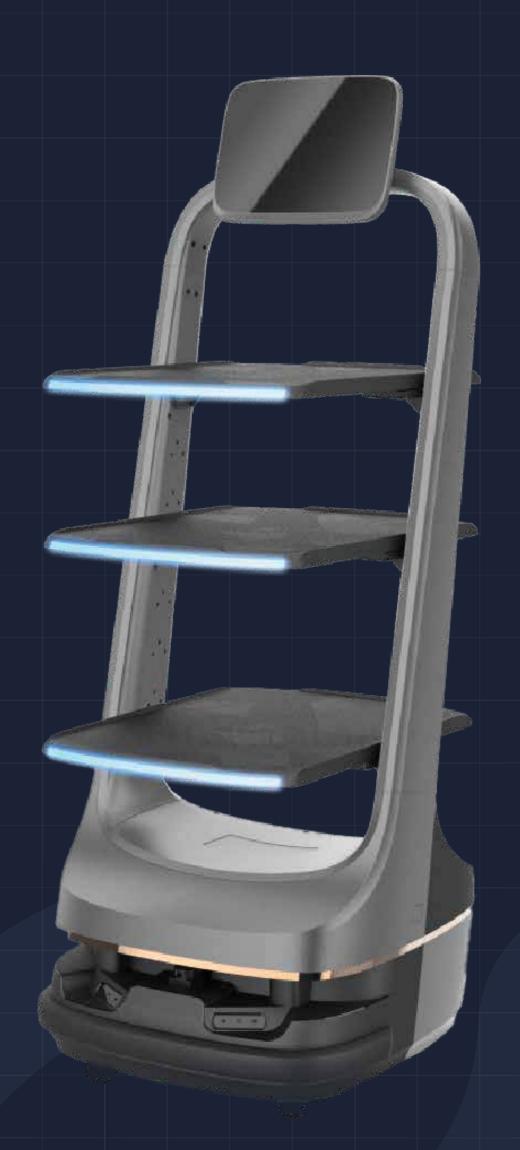
Building the future

#### Delivery X1 / X1 Pro

#### Product Specifications

Feature	Indoor Delivery
Size	I520*w484*h1,250mm
Unladen Weight	35 kg
Tray Dimension	400*(L)*470(W)mm
Load Capacity	10kg*3
Tray Features	Weight Sensor and Nteractive Light
Network Standard	4G
Wifi	2.4GHz
Screen Size	10.1 Inches
Max. Travel Speed	1.2m/s
Max. Climbing Degree	5°
Min. Passage Width	80cm
Min. Turning Diameter	80cm
Braking Distance	5cm
Battery Capacity	20Ah
Rated Voltage	29.4V
MAX. Output Power	230W
Uptime	14H
Charging Time	4H
	Lidar, Depth camera, Bumper
Sensor System	pressure sensor for tray (X1 Pro)





### Service Delivery Robots

Indoor Delivery



#### Specialzied in delivery and hotel facilitation.



- Fully Autonomous Positioning and Navigation
- Equipped with self-developed SLAM synchronous localization and map construction system
- Enclosed structure and automatic cleaning of the inner cabin
- Multi-robot cooperation and continuous optimization of the loading capacity
- Smart hotel ecosystem, driving an intelligent revolution of the hotel industry and creating higher value for hotels

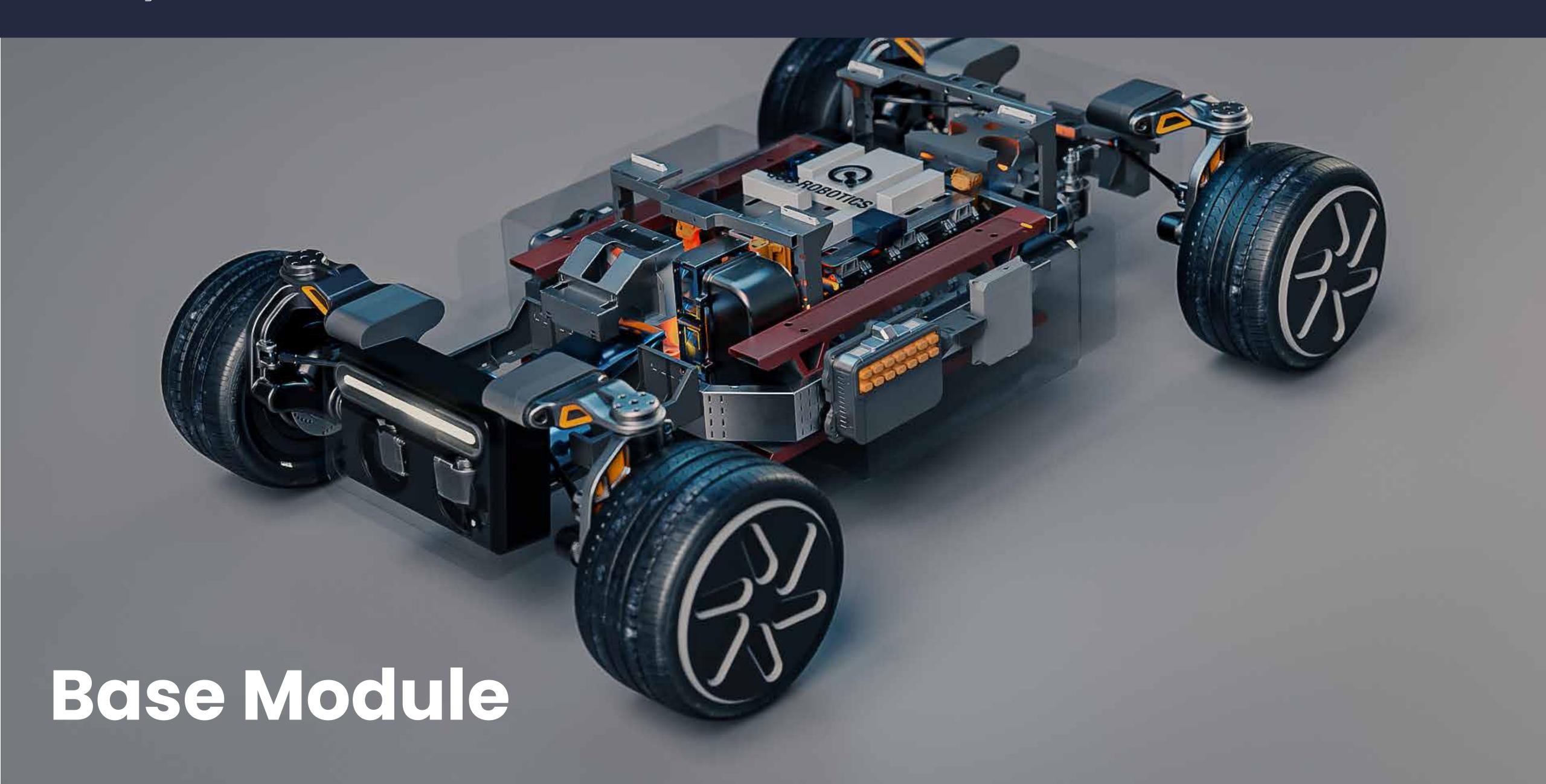
## Autonomous Vehicles

Building the future

## The First Saudi Made Modular Autonomous

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Robot













#### MMAR Software

The intelligent crime detecting software
Built from scratch, the software contains 5 AI
engines that work together to define suspects
and report incidents

After recognizing the identity of the target through the Facial Recognition engine, the software is able to understand the target's actions using the Behaviour Analysis engine and determine whether or not they are a suspect by using the Suspect Matrix and Criminal Logic engines.





Plate Recognition



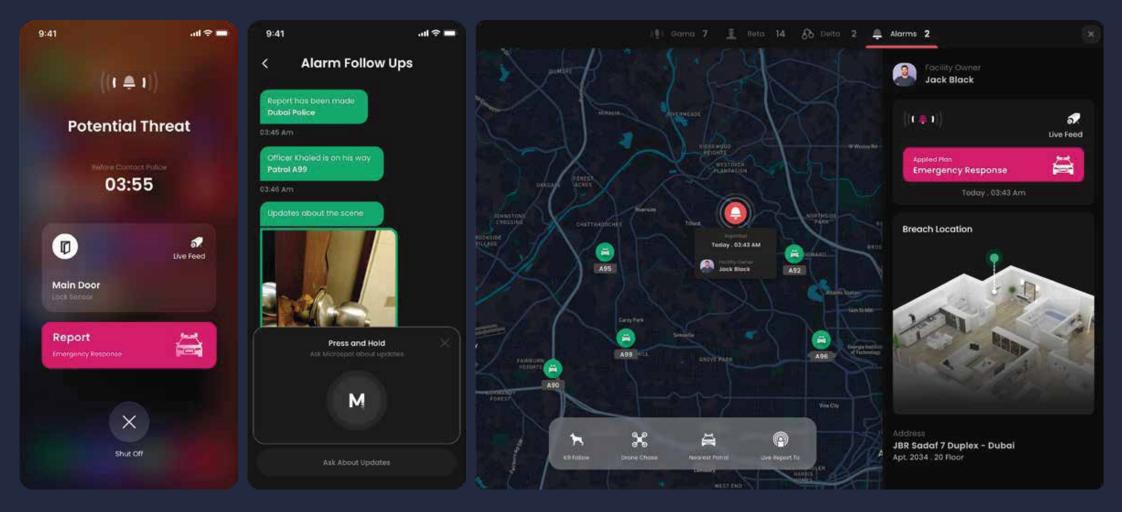
Behaviour Analysis

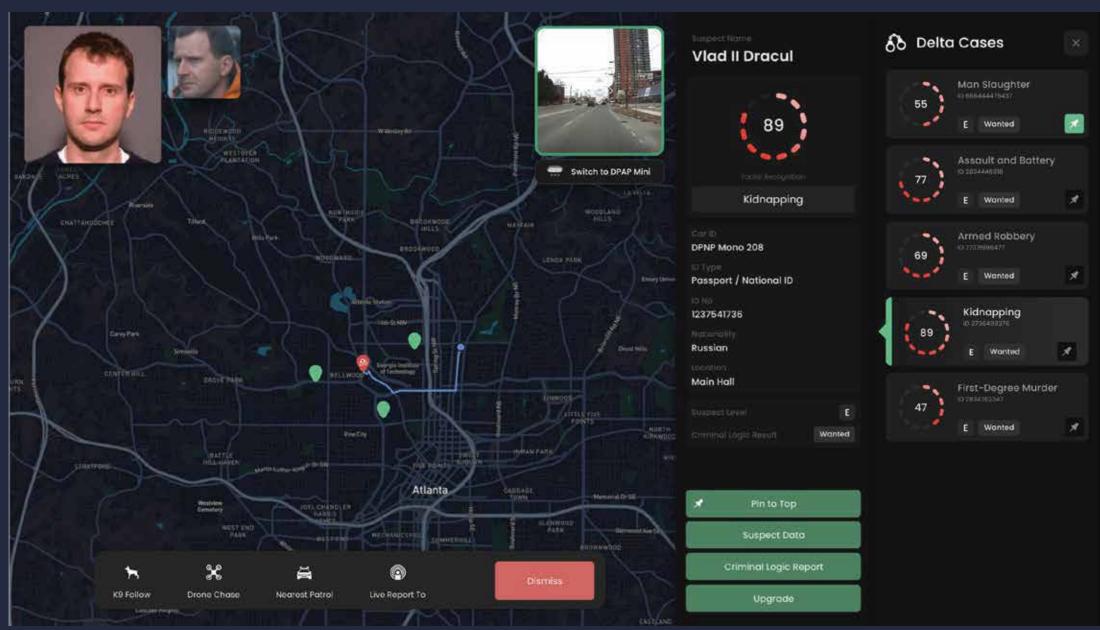


Suspect Matrix



Criminal Logic





# Entertainment and Reception Robots





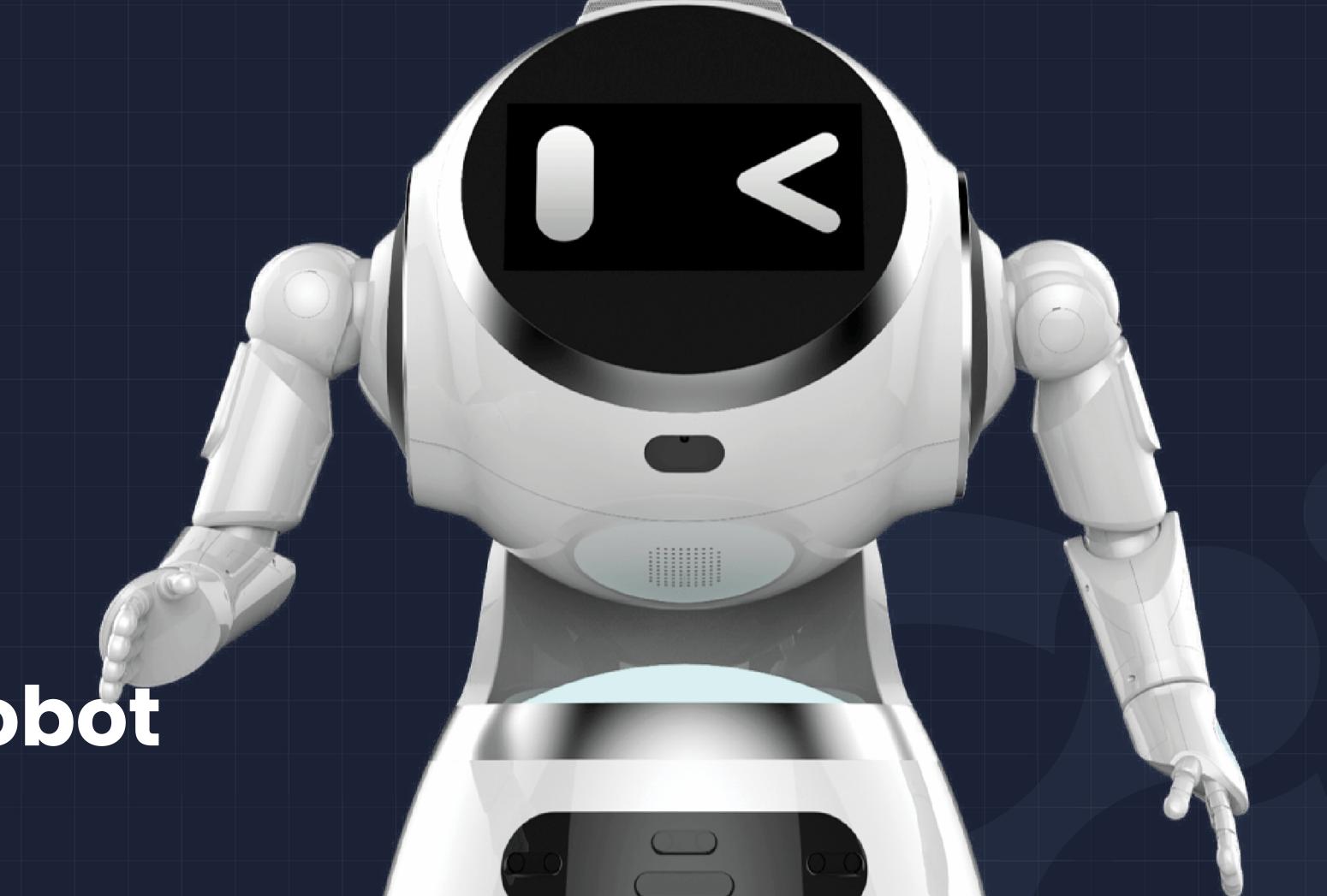
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#### TITAN ATTENDANT ROBOT.

Terminus Titan Attendant Robot is a service robot designed for public settings. It is equipped with automatic motion system, capable of performing tasks in offices, schools, shopping centers, etc. It provides multiple services including greeting, information management, self-service, and visitor access management.

- Consultation
- Guiding
- Business Processing
- VIP Reception





#### Wizo Humanoid Robot

#### Intelligent Service Without Limits

WISO provides a new generation with service applications for a variety of industries and domestic environments.

- A New Era of Robotic Intelligent Service
- Cloud-based robotic OS
- Open API
- Customized service
- One-stop solution

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#### Flexible Arms and Human Movements

With 17 servos, Wiso moves like a human. With its Four-Layer Protection System Wiso is capable of shaking hands, greeting visitors, moving around, dancing and hugging

#### 360°Movements

Wiso uses abrasion resistant and quiet omni-directional wheels to move smoothly and stable, while being able to turn in any direction instantly.

## Customized Service







#### Walker Humanoid Robot

Building the futur

#### Walker - The Humanoid Robot

- Complex Terrain Navigation
- Self-Balancing & Anti-Disturbance Upgrades
- Upgraded Autonomous Navigation
- Improved Hand-Eye Coordination
- AloT Connectivity + Smart Home Control
- Safe Human-robot Interaction
- Multimodal Emotional Interaction
- Excellent Environmental and Human Perception



## Sara Humanoid Robot





Building the future

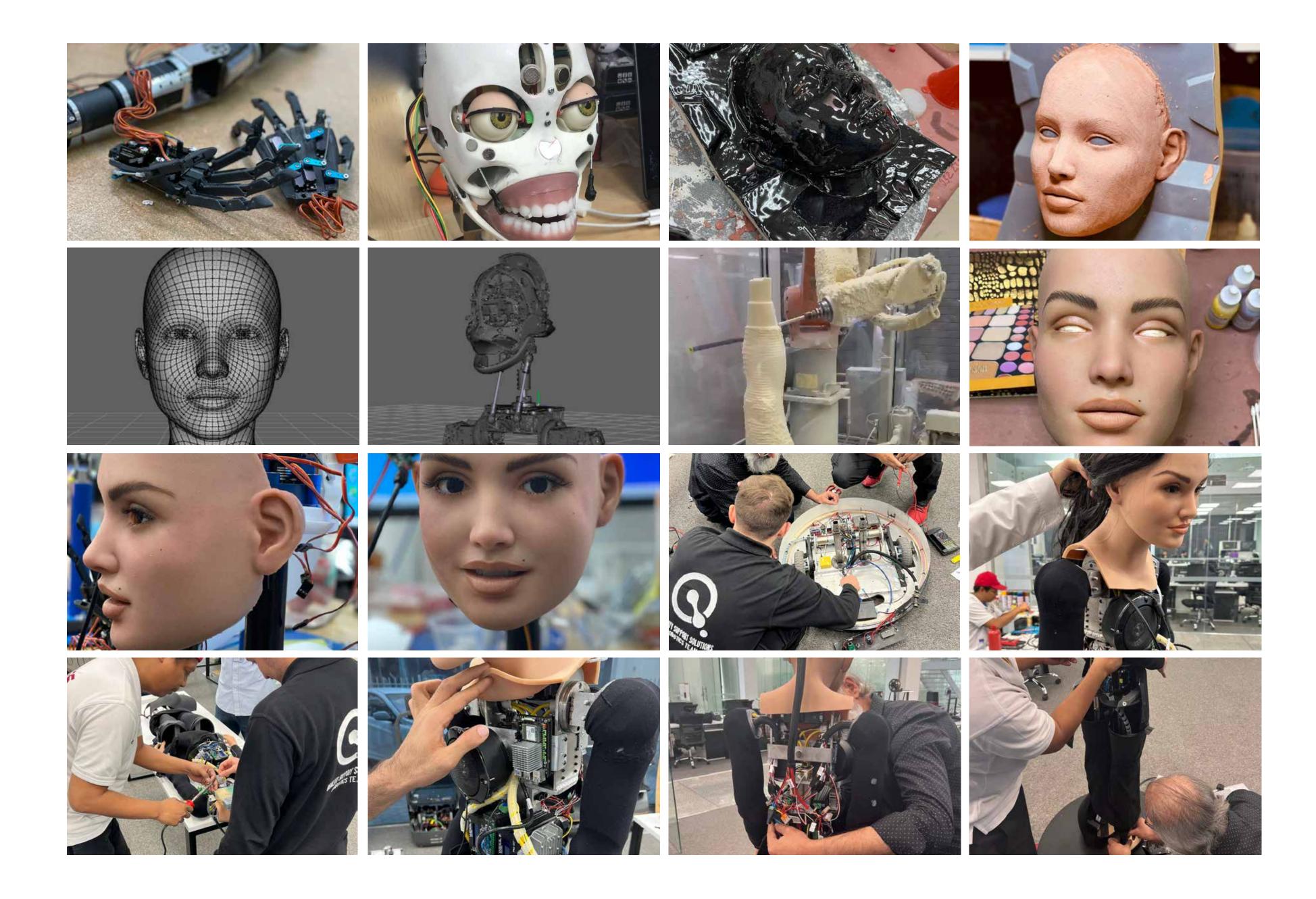
#### What Sarah can do?

- A. talk several languages.
- B. Mouth movement.
- C. Hands movement.
- D. Facial expressions.
- E. Dancing, sing.F. Facial recognition.G. Listen and understand.



#### Production process

Sarah holds an infinity of interaction scenarios and keeps the conversation going. It provides individual services, delivers marketing messages, and gives information about your company's products.



## Healthcare Robots





## Intelligent Logistics Solution with High-Level Efficiency and Convenience

Terminus Titan Sanitizer Pro Robot is the world's first robot sanitizer targeting large-scale public places including office buildings, airports, hotels and places as such. It is capable of fulfilling multipoint disinfection tasks in densely-populated indoor space. Equipped with a pioneered high-mobility chassis, the Sanitizer Pro Robot is able to achieve seamless sanitization 360° around targets, minimizing the risk of infection and operation costs.

360° UVC Coverage

12L 12L Capacity

1200mL/h Volume of Spray

99.99% Disinfection Rate

Building the Future

- Dual Disinfection
- High-Performance Chassis
- High Security Level
- Traceability







#### First Step in Wheelchair Development.

Robotic wheelchair is an amalgamation of intelligent robotics technology and an electric wheelchair. It is a kind of enhanced wheelchair that has capabilities of navigating, detecting obstacles and moving automatically by utilizing sensors and artificial intelligence.





#### Wheelchair Use Cases:

- শ্লেই Hospitals
- 台 Hajj & Umra
- **★** Airports
- Shopping Malls
- Residential Areas



## Industrial Robots





#### Intelligent And Flexible Automation

KUKA Arm offers industrial revolution in a wide range of versions with various payload capacities and reaches, to ensure faster and cost effective environments.

- Expandable software
- Ergonomic control panel with capacitive touch display
- Freely configurable



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#### Industrial - Multi Functional Robotic Arm

### Security Robots

# Titan Patrol Robot



Building the future

#### Titan Patrol Robot

Terminus Titan Patrol Robot is a cutting-edge security focused robot solution especially designed for public spaces. Patrol comes equipped with a High-Tech 360-degree camera system, Facial Recognition, Thermal Imaging and Night Vision. Titan Patrol excels in closed or semi-closed environments ranging from traffic checkpoints, campuses to industrial parks, malls and airports.

24x7
Autonomous Patrol, Rain or Shine

-10°C ~ 55°C

Operating from -10°C to 55°C

Night Vision

HD security camera with night vision

IP54 Rating

LIDAR
3D LIDAR

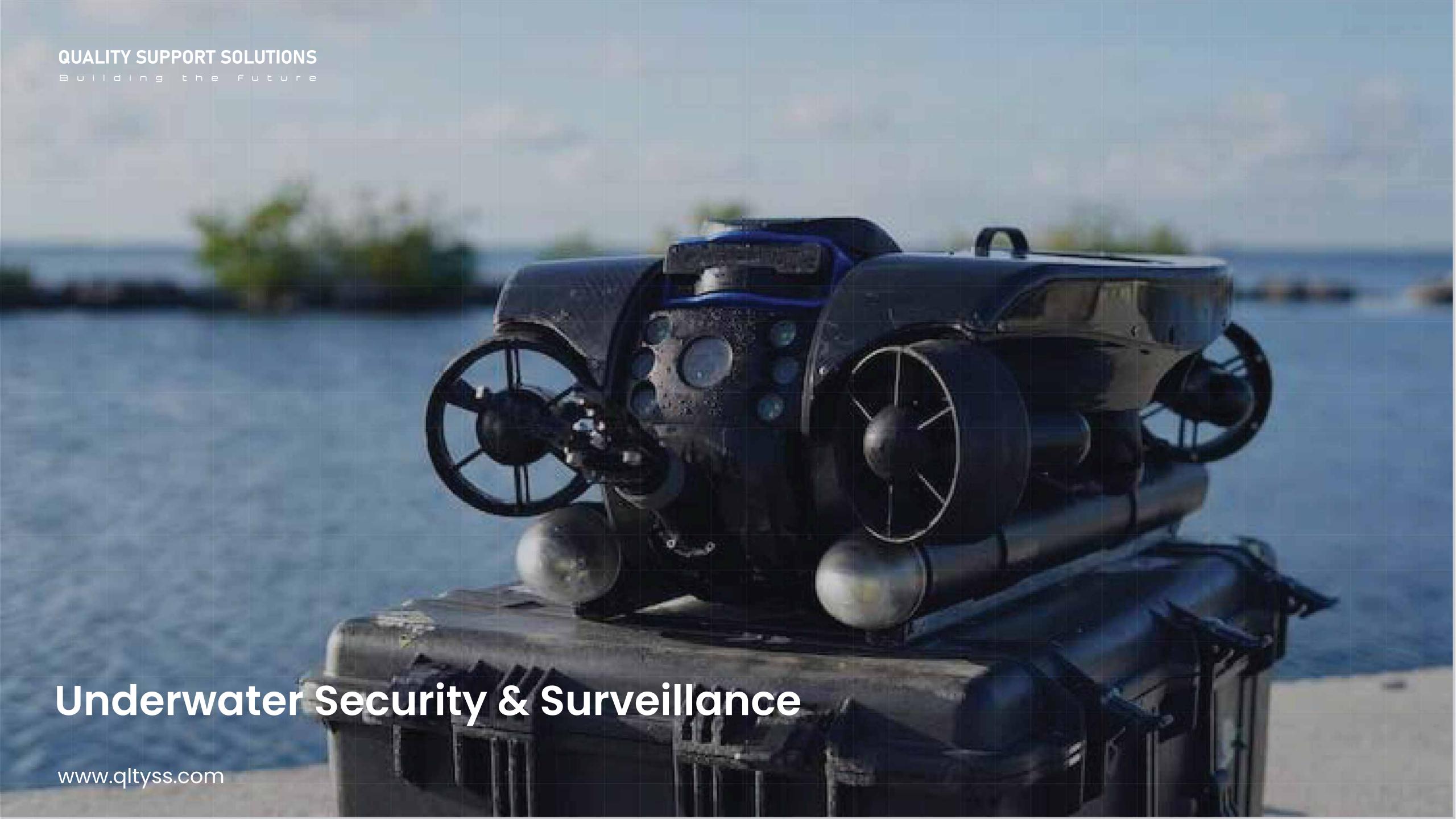
8h Capable of long-endurance tasks up to 8h

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- Autonomous Patrol 24/7
- 4G/5G & Wi-Fi Network
- Video Surveillance and Intelligent Analysis
- Remote Control
- Emergency Alarm







# Food and Beverage Robots





Our technologies enable robot baristas to learn various coffee making techniques from human baristas.

#### ROBOTICS

The robots are trained by expert human baristas using artificial intelligence to brew specialty coffee. As robots, they eliminate the risks that human contact may pose to public health.

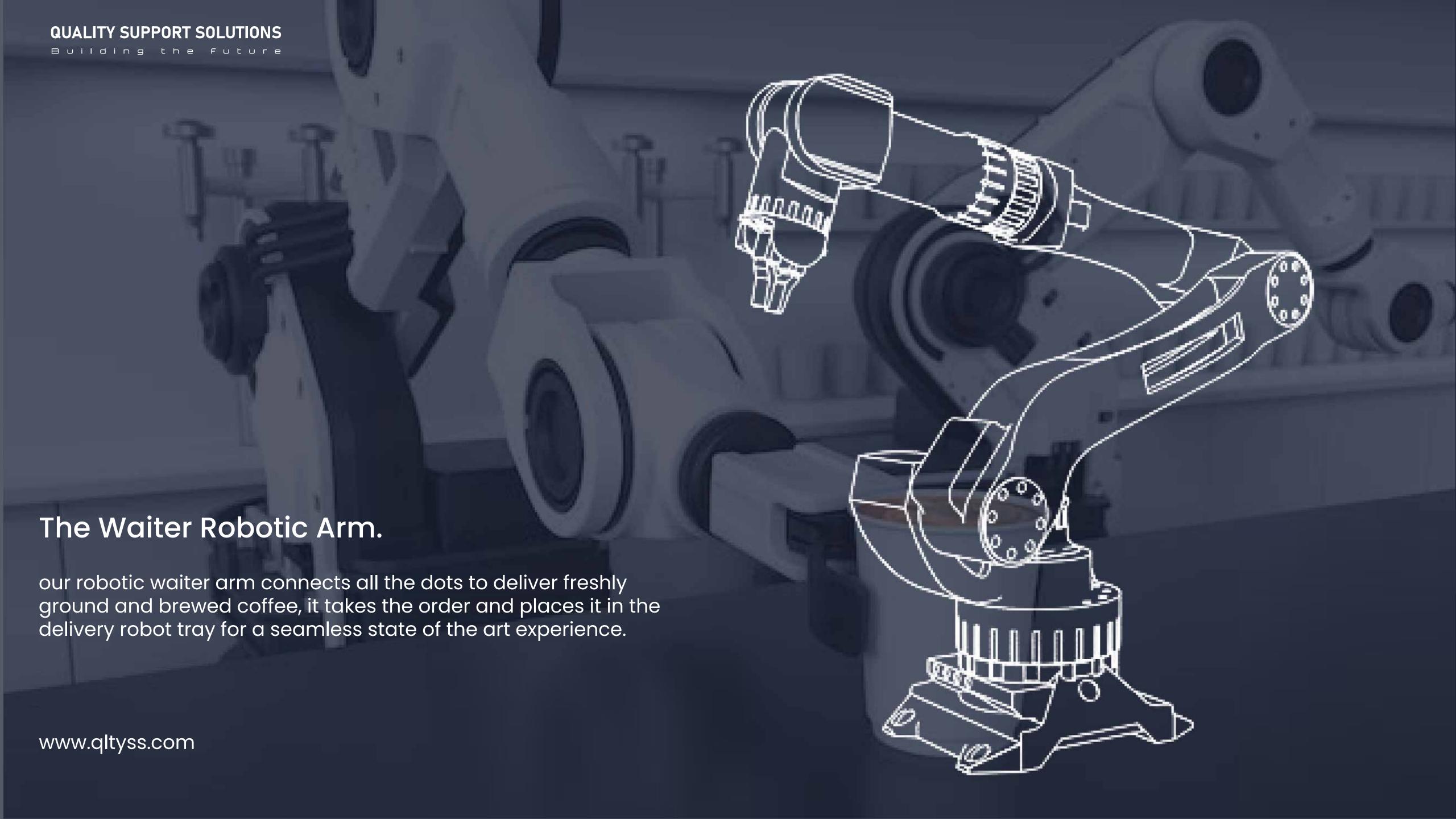
#### **COMPUTER VISION**

We equip our robots with state-of-the-art computer vision technology to locate nearby objects, to be safe and friendly to human, and to inspect the quality of coffee.

#### **CLOUD**

The robots draw from a suite of programs, accessible on Artly's cloud infrastructure, to accomplish tasks that include grinding beans, steaming milk, and pouring latte art.





# Insepction Robots

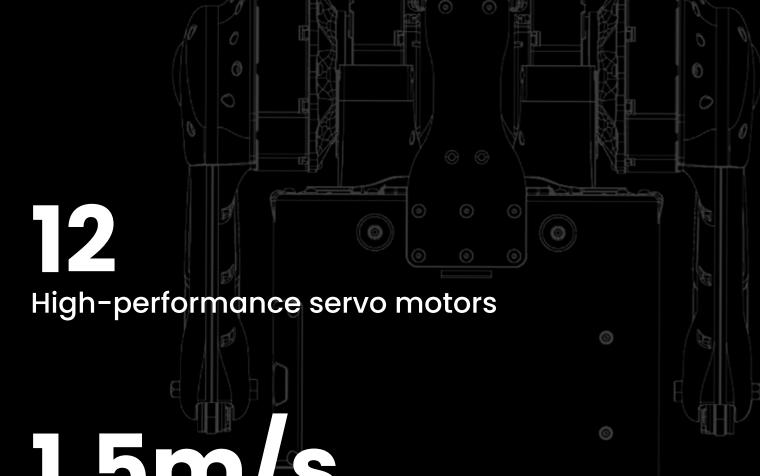
## Robotic Inspection DOG www.qltyss.com



### State of the Art Robotic Device with High-Capacity Battery

Patented standalone design delivers perfect balance of self weight and performance; High-capacity power allows the robot dog to work through long shift.

- Self-developed lithium battery powers the robot up to 4.5 hours
- Integrated cooling system is capable of autonomous temperature sensing
- Robot is mad of environmentally friendly materials such as as polymer plastic, carbon fiber and aviation aluminum
- Certified as high-protection level
- Integrated design with built-in battery and signal wires



Maximum moving speed

It's capable of special movements such as fast running, backward running, side-to-side movement, pivot steering, creeping forward, rollover, jumping, backflip, obstacle crossing, obstacle avoidance, getting up after falling to the ground, going up and down slopes/steps, etc. It resists impact well, and thus stays stable while running, jumping, crashing or falling.

## Robotic Inspection Dog www.qltyss.com



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#### TRANSFORMATIVE MOBILITY

#### Strong

Carry and power up to 14kg of inspection equipment.

#### **EASY TO CONTROL**

Control the robot from afar using an intuitive tablet application and built-in stereo cameras.

#### SMART

Program repeatable autonomous missions to gather consistent data.



# Education Robots

### Alpha mini Educational Robot



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#### **TEACHING ASSISTANT**

AlphaMini can deploy customized teaching activities on either a one-to-one basis or in small groups. He can help educators to teach core subjects including reading, writing, math, English...as well as a wide range of fields linked to robotics such as mechanics, motion control and computer science.

■ 3 sensors ■ Gyroscope

■ Dual IPS LCD

4 mic array

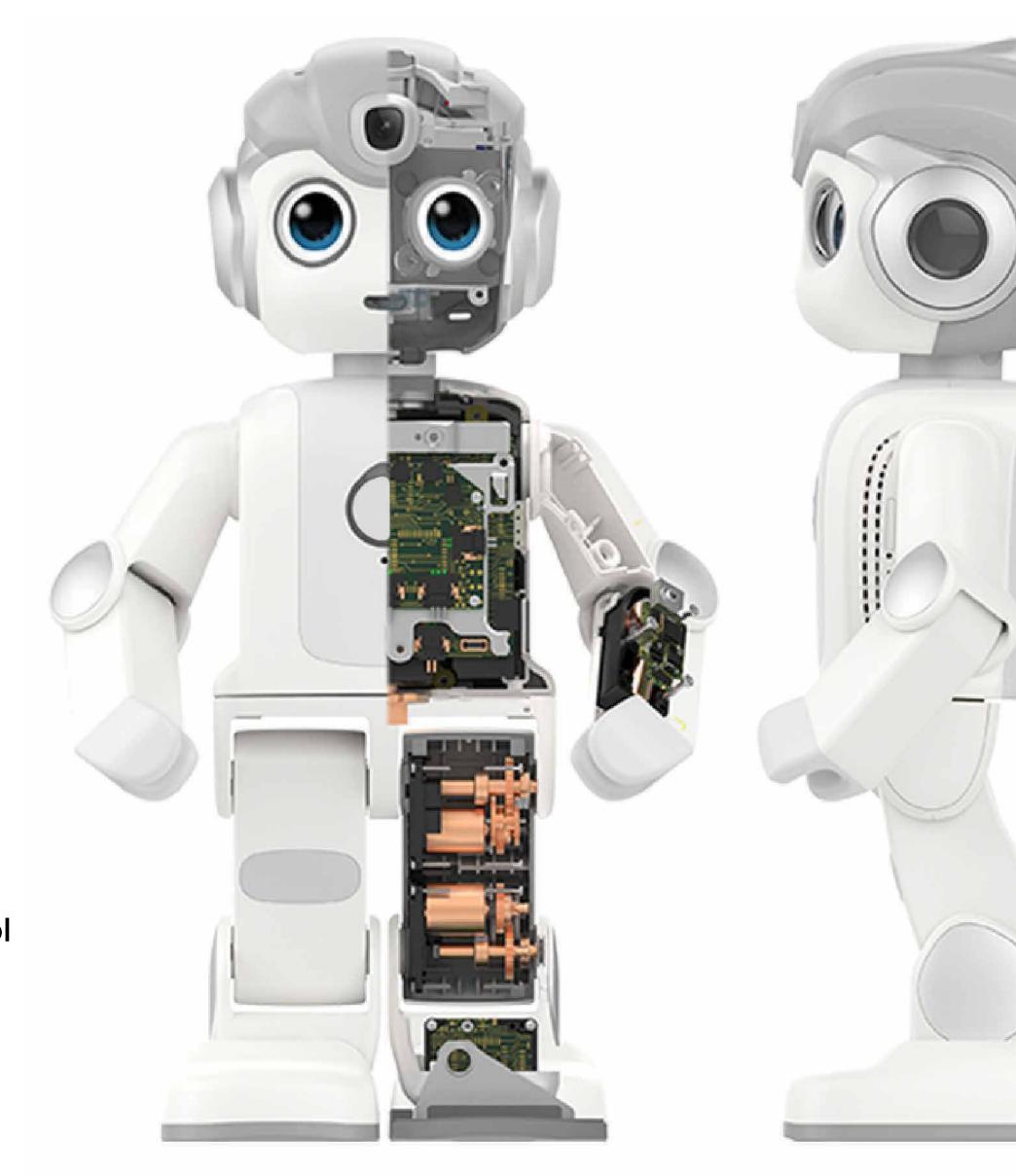
communication kit

■ Stereo sound

■ 14 servos

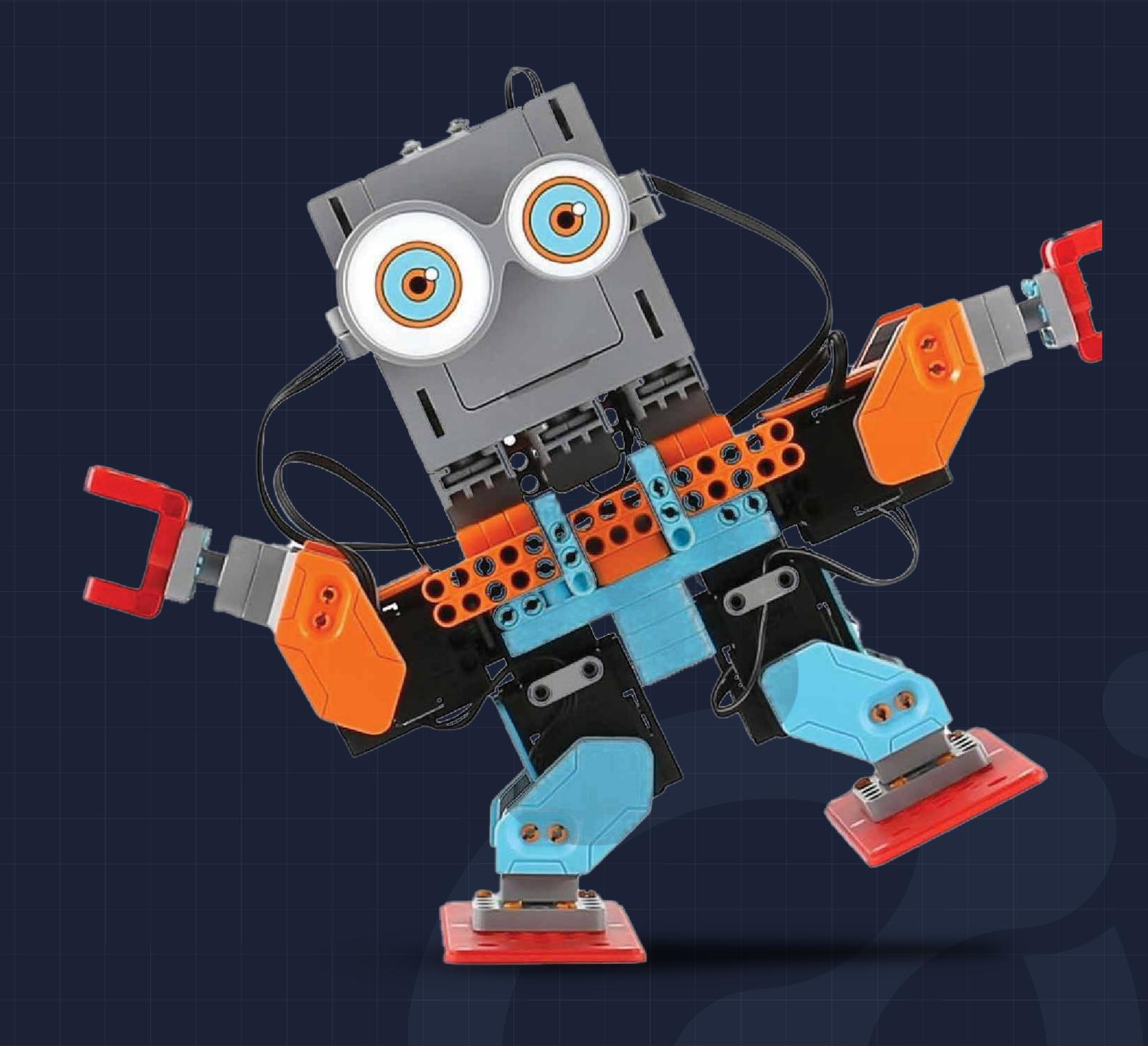
HD camera

■ Primary (upper- grade) + middle school





Educational Robotic Kit



OPEN-SOURCE Robotics for Rich Learning.

The uKit has a main control box equipped with **Arduino** open-source platform which offers an incredible amount of electronics and programming learning resources from contributions of users worldwide.



Servers a wide range of educational levels.



34+ official models



16 servos



60+ course hours



bluetooth speaker



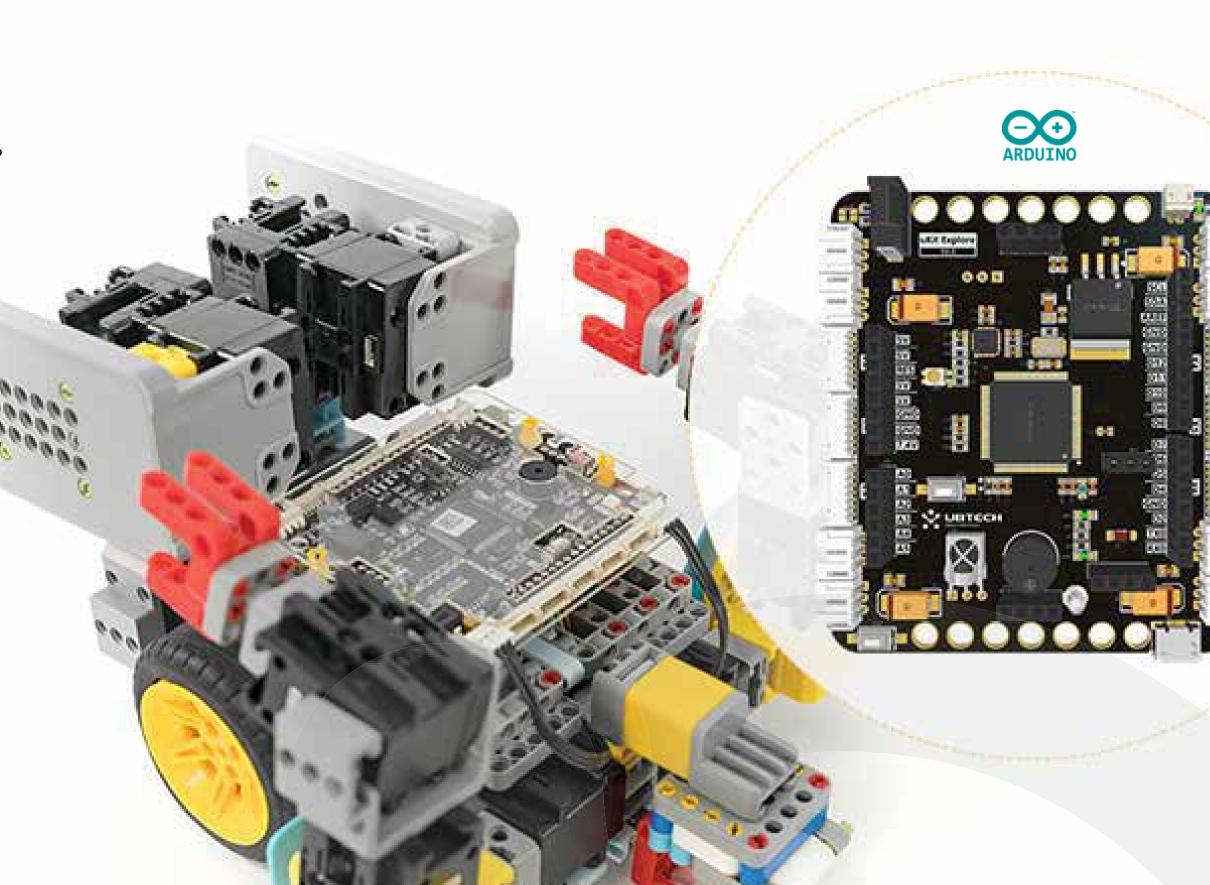
4 sensors



600+ components & parts



LED lamp



# Facility Management Robots

Building the future

#### Scrubber 50 /50 Sprayer

**Product Specifications** 

Scrub, Sweep, Mop, Sanitize 1860\*w700\*h1,030 mm (133\*w27\*h40in) Size (without Sprayer Kit) 155/145 kg (342/320 lb) Unladen Weight 500 / 460 mm (20/18in) Cleaning Width(disc brsush / roller brush)\_ 1,600 m²/h (17,222 ft2/h) Theoretical Max. Cleaning Productivity 1200 w (1.6 hp) Max. Output power Max. Gradeability \_ 1 m/s (2 mph) Max. Moving Speed Height Adjustable 2\*230mm (9in) Disk Brush \_\_\_\_ Roller Brush (optional) \_\_\_\_\_ Height Adjustable 2\*ø72\*370mm (2.8\*14.5in) Compatible Dust Mop Clean / Recovered Water Tank \_ 24/18 I (6.3/4.8 us gal) 2\*0.6 I (0.16 us gal) Trash Tray (for roller brush) \_ 2d Lidar, 3\*Depth Camera, Air Pressure Bumper Sensor System Max. Endurance Nozzle Atomized Particle 1.8 I/h (0.5 us gal/h) Max. Atomizing Flow Atomizing Duration Life Span of Atomizer ≥5,000 h Hypochlorous acid, QAC Sanitizer, etc. Recommended Disinfectants

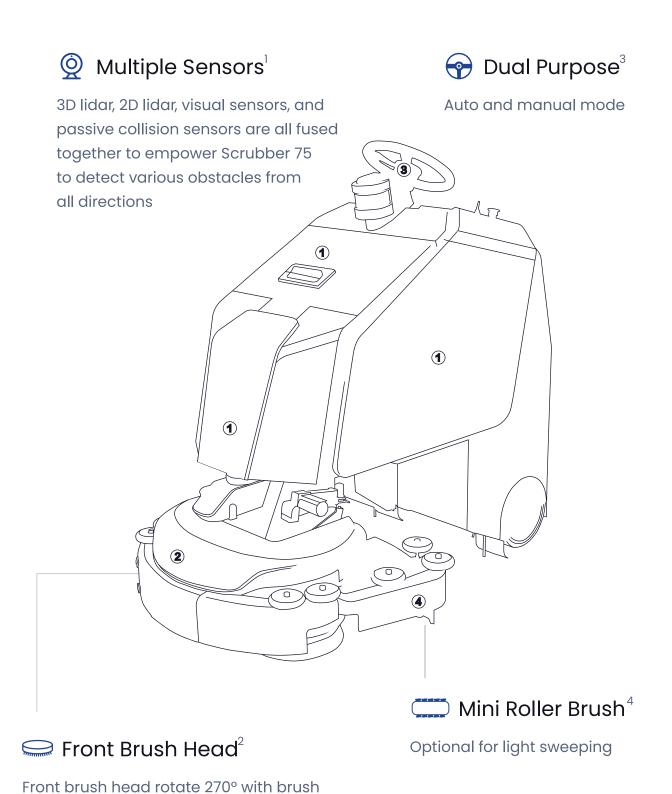




#### Scrubber 75 / 75P

#### **Product Specifications**

Scrub, Sweep, Mop, Degrease Size \_\_\_\_\_\_ | 11370\*w962\*h1,417 mm (54\*38\*56in) 400 kg (880lb) Unladen Weight 750 mm (30in) Cleaning Width Theoretical Max. Cleaning Productivity \_\_\_\_\_ 3,000 m²/h (32,292ft2/h) 2,000 w (2.7 hp) Max. Output power Max. Gradeability 1.1m/s (2.5 mph) Max. Moving Speed \_\_\_\_ 10 mm (0.4in) Max. Passable Obstacle Height \_\_\_\_ Disc Brush \_\_\_\_\_ 3\*254 mm (3\*10in) \_\_\_\_\_ 2\*ø100\*370 mm (3.9\*14.5in) Roller Brush (optional) \_\_\_\_\_ 75/501 (20/13 us gal) Clean / Dirty Water Tank \_\_ 3D LiDAR, 2D LiDAR, 3D Camera Collision Bumper Sensor System Millimeter-wave Radar (75 P) ≈4 ~ 6h Max. Endurance



rotation speed at 270 rpm and scrubbing pressure 45kg (99 lb) , leaving no area

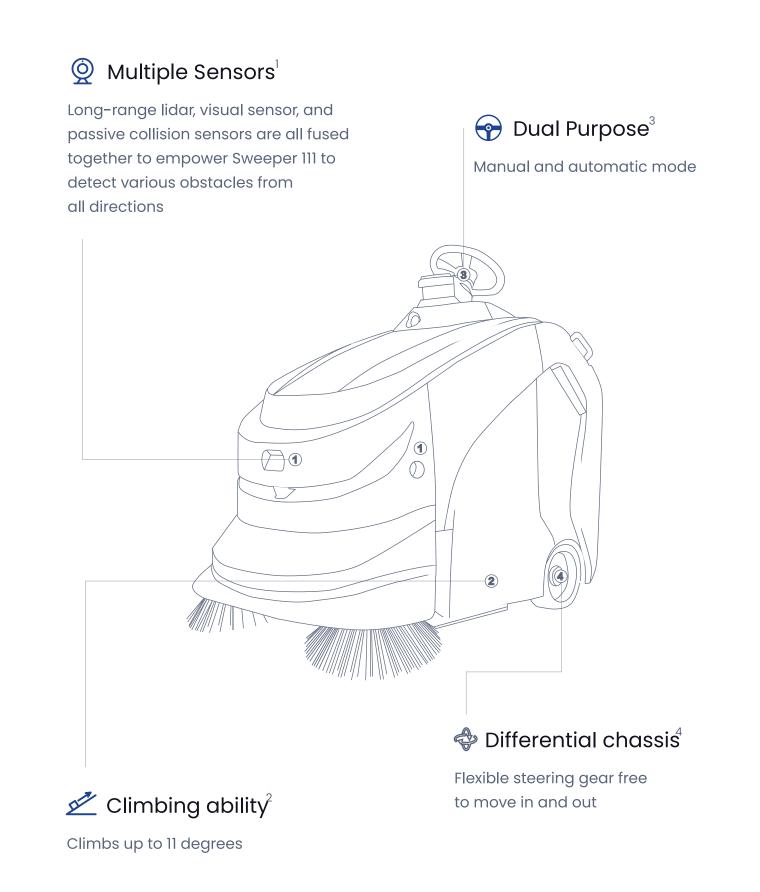
uncleaned



#### Sweeper 111

**Product Specifications** 

Feature \_\_\_\_\_ Size \_\_\_\_\_\_ | | 11530\*w1,010\*h1,400 mm (| 160\*w40\*h55in) 500 kg (1,100lb) Unladen Weight \_\_\_\_\_ 1,100 mm (43in) Cleaning Width \_\_ Theoretical Max. Cleaning Productivity \_\_\_\_\_ 5,500 m<sup>2</sup>/h (59,200ft2/h) 2 m3/min Max. Air Flow Volume \_\_\_\_\_ 24v dc Rated Voltage \_\_\_\_\_ Max. Output Power \_\_\_\_\_\_ 2,500 w (3.4 hp) Max. Moving Speed \_\_\_\_\_\_ 1.2 m/s (2.7mph) Max. Gradeability \_\_\_\_\_\_\_\_\_11º Max. Passable Obstacle Height \_\_\_\_\_\_ 40 mm (1.6in) Height Adjustable 2\*ø400 mm (15.7in) Front Fixed + Rear Adjustable, 2\*ø330\*480 mm (13\*19in) Roller Brush \_\_\_\_\_ 601 (16 us gal) Trash Box \_\_\_\_\_ 200\*50\*50 mm (8\*2\*2in), 250 g (0.55 lb) Max. Cleanable Trash Size and Weight \_ 3d lidar, 2d lidar, 5\*depth camera air pressure bumper Sensor System \_\_\_\_ ≈4h ~ 7h Max. Endurance





#### Vacuum 40 / 40 Diffuser

#### **Product Specifications**

Vacuum, Sweep, Mop, Sanitize/Scent (Optional) I700\*w570\*h875 mm (I27\*w22\*h34in) Size (without Diffuser Kit)\_ 80kg (176 lb) Unladen Weight (without Diffuser Kit) 720mm (28in) Cleaning Width 1,200m²/h (13,000 ft/h) Theoretical Max. Cleaning Productivity 24v dc Rated Voltage 960w (1.3 hp) Max. Output power 2.0 m3/min Max. Air Flow Volume Max. Gradeability 1m/s (2.2 mph) Max. Moving Speed Compatible Dust Mop 121 (3 us gal) Dust Bag 2.51 (0.7 us gal) Trash Tray 24 kpa (3.4 psi) Max. Vacuum Pressure Air Filter (hepa) Max. Gradeability 2D LiDAR, 3D Camera Air Pressure Bumper Sensor System \_Sanitizing / Scenting Diffuser Kit Ultrasonic / Air Comperssor Pump **Atomization Type** \_4L (1.05 gal) / 500ml (0.13 gal) Container Capacity 1.5 l/h (0.4 gal/h) / 6 ml/h (0.002 gal/h) Max. Atomization \_ ≥ 5,000 h / ≥ 8,000 h Atomizer Lifespan Hypochlorous, QAC Sanitiser / Essential Oils Recommended





# Customized Robots



Building the Future

## Al Enabled Smart Manufacturing



#### Entire Manufacturing Process Covered

Raw material inbound/outbound, raw material picking/supplying, semi-product transporting, finished product inbound/storing/picking/outbound.



### QSS ROS Platform

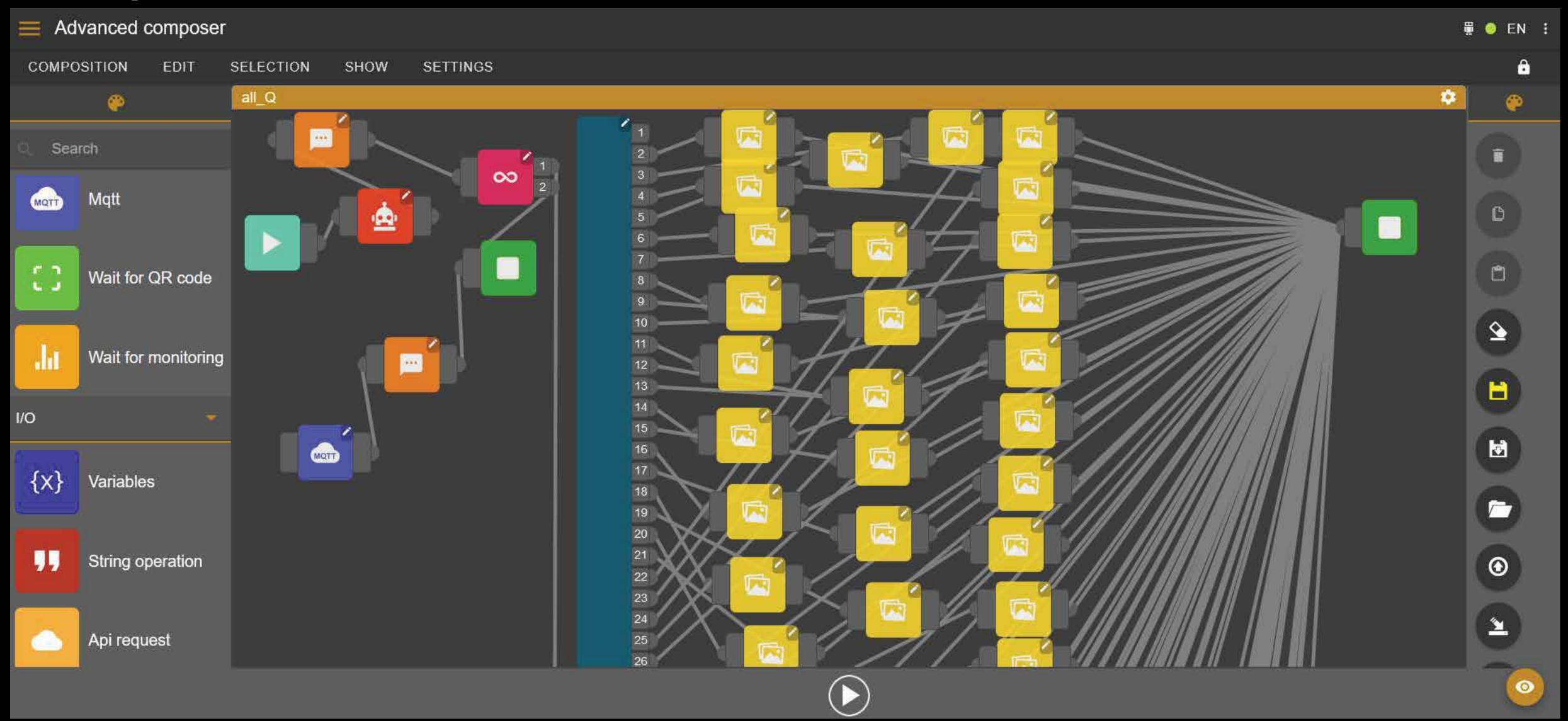


#### Intelligent Service Without Limits

ZBOS Control enables you to control your ZBOS devices. You can make them move, speak in multiple languages, make and play little programs, look through the camera and so much more!

- Full remote control of your robot via local network or cloud connection
- Create a map of your surroundings, create points-of-interest and navigate between them
- Create tailored surveys and quizzes in your business or personal style
- Access security footage
- Initiate a bidirectional video conference
- Create simple or complex sequences of tasks
- Use the Task Manager to start any sequence of tasks on based on a broad range of triggers

Building the future



#### Certificate of Registration

This is to certify that Quality Management System of

#### QUALITY SUPPORT SOLUTIONS

7302 Eastern Ring Road, 4571 Ar Rabwah Dist., 12824 Riyadh

is in accordance with the requirements of the following standard

ISO 9001:2015

(Quality Management System)

SCOPE

Robotics & Artificial Intelligence Solutions

Certificate Number: SCK/01/QSS/22/96/3560

To verify certificate, visit at:

www.sckcerts.com www.iafcertsearch.org

Initial Registration Date: 12-Dec-2022 1\* Surveillance Date : 12-Nov-2023 2\* Surveillance Date : 12-Nov-2024

Certificate Expiry Date: 11-Dec-2025

Issued by SCK Certifications Pvt. Ltd.









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#### Certificate of Registration

This is to certify that Information Security Management System of

#### QUALITY SUPPORT SOLUTIONS

7302 Eastern Ring Road, 4571 Ar Rabwah Dist., 12824 Riyadh

is in accordance with the requirements of the following standard

#### ISO 27001:2013

(Information Security Management System)

SCOPE

Robotics & Artificial Intelligence Solutions

(SOA: SOA/QSS/Ver.1.0/Rev.00/Date:12.05.2022)

Certificate Number: SCK/05/QSS/22/96/3562

To verify certificate, visit at :

www.sckcerts.com www.iafcertsearch.org Initial Registration Date: 12-Dec-2022 1<sup>st</sup> Surveillance Date: 12-Nov-2023 2<sup>rd</sup> Surveillance Date: 12-Nov-2024

Certificate Expiry Date: 11-Dec-2025

Issued by SCK Certifications Pvt. Ltd.







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#### Certificate of Registration

This is to certify that Occupational Health & Safety Management System of

#### QUALITY SUPPORT SOLUTIONS

7302 Eastern Ring Road, 4571 Ar Rabwah Dist., 12824 Riyadh

is in accordance with the requirements of the following standard

ISO 45001:2018

SCOPE

Robotics & Artificial Intelligence Solutions

Certificate Number: SCK/03/QSS/22/96/3561

To verify certificate, visit at:

www.sckcerts.com www.iafcertsearch.org Initial Registration Date: 12-Dec-2022

1<sup>st</sup> Surveillance Date: 12-Nov-2023 2<sup>st</sup> Surveillance Date: 12-Nov-2024 Certificate Expiry Date: 11-Dec-2025

Issued by SCK Certifications Pvt. Ltd.









This certificate remains the property of SCX and must be enturied to SCX on Cancellation or Suspension of the certificate Velicity of the certificate is subject to success of the certificate is subject to success of the certificate in the Continuation on in backs of the certificate and the applicability of standard may be obtained by consulting the Continuation on in backs of the certificate.

### Our ISO Certificates

Issuance Date: 10.11.2022

CCC Reference Number: 09-989-101122-N



#### **Cybersecurity Compliance Certificate**

This is to confirm that

#### **Quality Support Solutions Co. Ltd**

[Commercial Registration No. 1010559652] Riyadh, KSA

Was subject to an assessment by RSM - Saudi Arabia to evaluate its compliance with Saudi Aramco Third Party Cybersecurity Standard (SACS-002). Based on the assessment carried out between 15 Septmeber 2022 and 11 October 2022, Quality Support Solutions Co. Ltd was found to be compliant with the Standard.

For the classification of: General Requirements, Type: CCC

This certificate is valid for a period of two years from the date of issuance.

## CR. 4030228773 CR. 4030228773 CR. 4030228773

#### Disclaimer:

This certificate is provided based on the information provided by Quality Support Solutions Co. Ltd that indicates their cybersecurity posture at the time of the assessment. RSM – Saudi Arabia has not evaluated the adequacy or appropriateness of the Standard compiled by Saudi Aramco. RSM – Saudi Arabia evaluation was limited to assessment against Saudi Aramco Third Party Cybersecurity Standard (SACS-002) and should not be relied upon as an assurance beyond the areas covered by this Standard. RSM – Saudi Arabia shall not be liable for any loss, damages, costs or expenses directly or indirectly incurred by any third party, who may rely upon this certificate for whatsoever reason. This certificate is only for the purpose of meeting the requirements of Saudi Aramco and should not be published on any website or relied upon by anyone other than Saudi Aramco.

Authorized Signatory

By Audit Firm

Saudi Aramco: Company General Use

## Our Cybersecurity Compliance Certificate

Building the future

# Robotic Use Cases





Boulevard Studios.





Riyadh Season.













Formula E Riyadh.





GEA / NEC





MCIT.













Dubai Expo 2020.





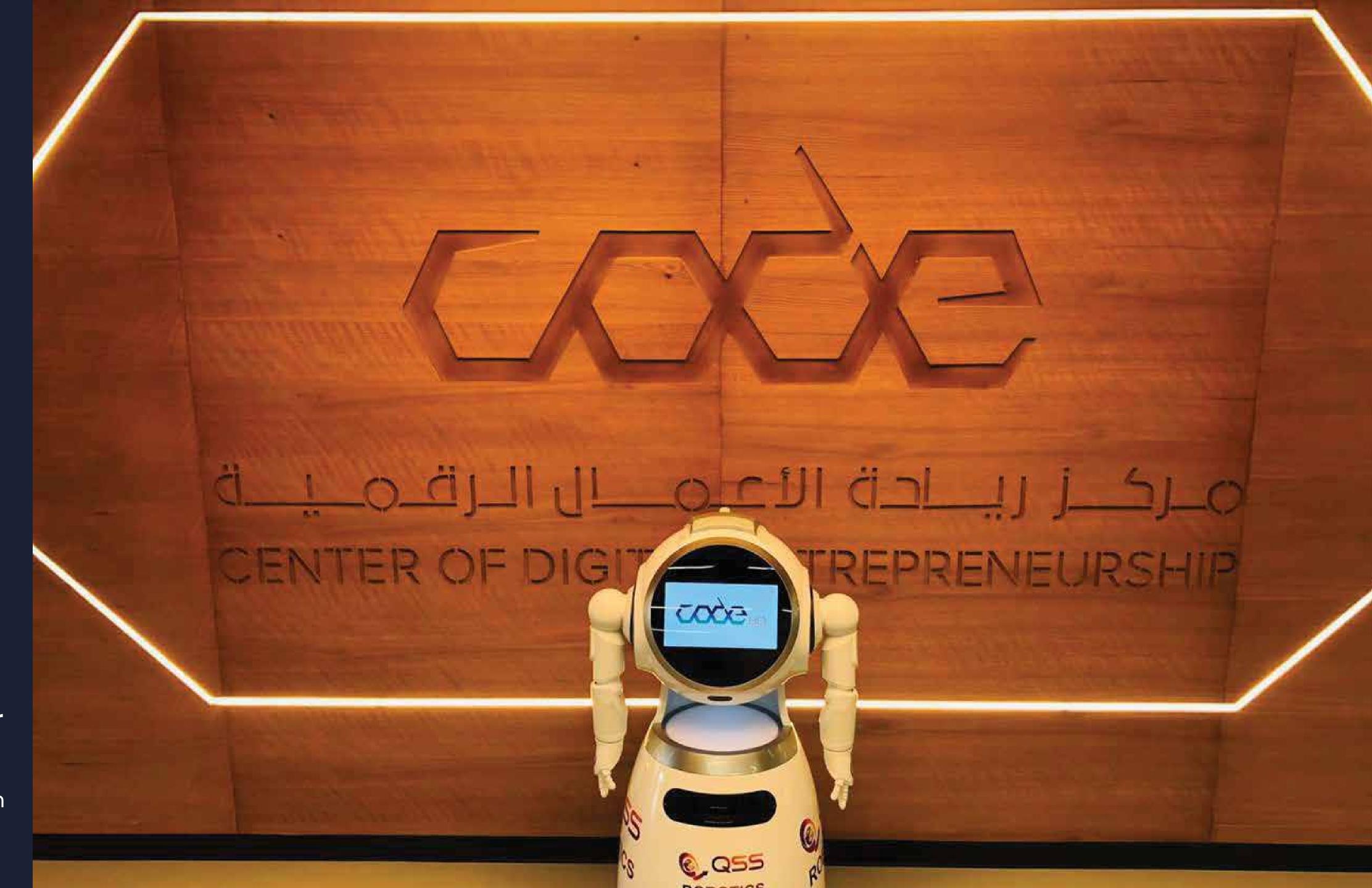
Robotic Arm Dubai Expo.





Robot Cafe Dubai Festival City





Code Center MCIT

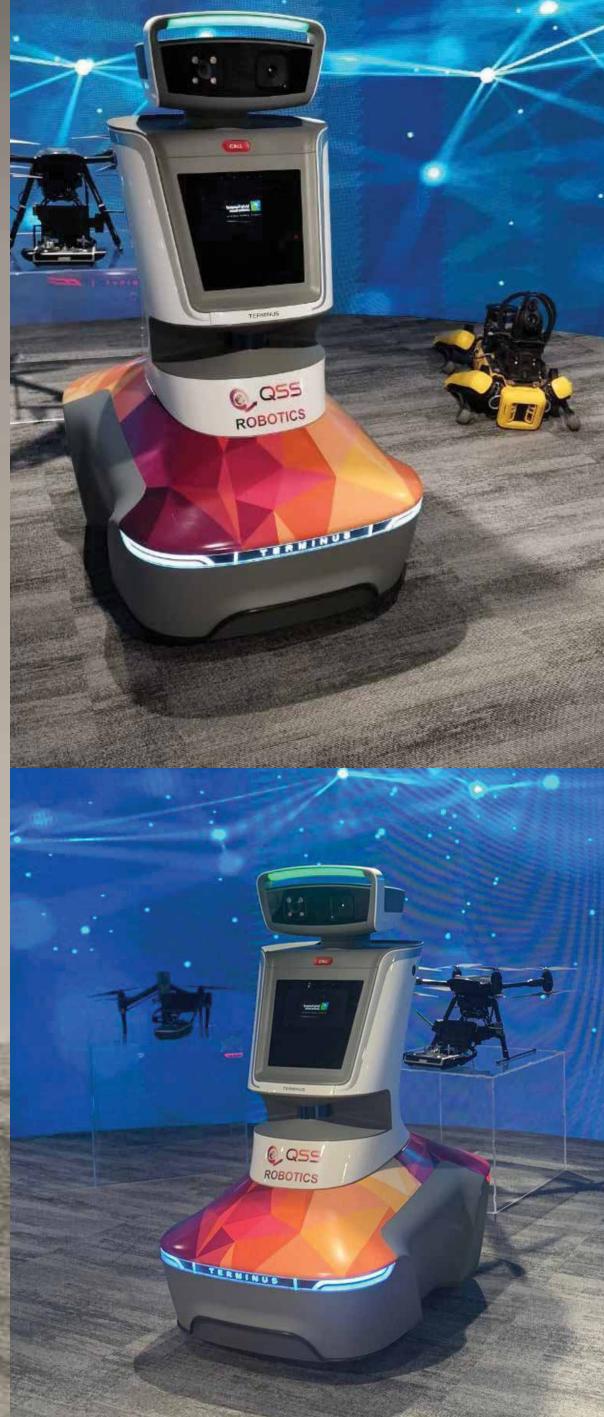




Saudi Royal Protocols







Saudi Aramco



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## Thanks for your time.