# **CTE SmartSafe Robots**

Protect and inform your staff, customers and visitors

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China Telecom (Europe) Ltd.

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# How prepared are you for the challenges ahead?

Is your business adequately prepared to cope with the challenges of today's ever-more complex world? Especially with the growing problems of dealing with the continuing repercussions of the Covid-19 pandemic? Controlling infection is hard when people move about so much for work and leisure, especially as restrictions are relaxed.

The challenges in maintaining the health and safety of your employees, and the people who visit your sites, are changing all the time. It's critically important to keep public spaces safe, while protecting the staff performing this vital work and keeping everyone alert.

## Protect your organisation with CTE SmartSafe robots

CTE SmartSafe robots help you keep your workplaces safe for everyone who passes through. They can help you clean your working environment, screen visitor temperatures, encourage mask wearing, direct and inform visitors and provide live updates to everyone on site. Indoors or outdoors. And because robots operate remotely, you're not putting your staff at risk.



Consistent and accurate results



Safely disinfect and patrol



Highly mobile and autonomous

# Choose the CTE SmartSafe robot that's right for your workplace

Features	CTE SmartClean	CTE SmartPatrol	CTE SmartScreen	CTE SmartRanger
Disinfects and sterilises	$\checkmark$	$\checkmark$	×	$\checkmark$
Screens body temperature without contact	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Checks for mask-wearing	×	$\checkmark$	$\checkmark$	$\checkmark$
Broadcasts directions, guidance and warnings	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Records and transmits data	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Displays information	×	$\checkmark$	$\checkmark$	×
Allows remote video communication	×	$\checkmark$	$\checkmark$	$\checkmark$
Self-drives and navigates	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Enables emergency calls	×	×	×	$\checkmark$
Works outdoors	×	×	×	√

# A CTE SmartSafe Robot for every workplace

#### CTE SmartClean robot: clean your workplace, screen your staff

The self-driving CTE SmartClean robot **disinfects your workspaces** after hours using UV and ozone. During working hours, your CTE SmartClean robot **monitors body temperatures**, checking up to 10 people simultaneously in the same area with ±0.5 °C accuracy.

Your team gets reports directly from the robot, so they can act on the data, including broadcasting safety messages from the robot itself.



#### CTE SmartPatrol robot: safety for queues and crowds



The CTE SmartPatrol robot can **check temperatures for up to 200 people** a minute, with ±0.3 °C accuracy. It can also recognise whether visitors are **wearing masks** with 99% accuracy, with audio reminders to those who aren't. Your CTE SmartPatrol robot also **cleans and disinfects quickly** and safely using common spray disinfectants, 24 hours a day.

Real-time data reporting, including PM2.5, temperature and humidity, allows your team to monitor the situation surrounding the robot. The operations team can also broadcast information and get alerts from the robot to help keep the area safe.

### Contact us today to find out more

Call CTE on +44 020 7537 7156 or email us at emeamarketing@chinatelecomglobal.com

### CTE SmartScreen robot: guide, communicate, respond

The CTE SmartScreen robot's video screen helps you to keep your customers and staff informed and connected. You can use it, combined with the broadcast function, to provide **guidance and alerts for your visitors**, including reminders of the latest restrictions, and direct them to where they need to go. Video guides can help your visitors after hours, or answer simple questions.

The screen also allows **remote video connection** – use it for staff to consult medical advisors, doctors to talk with nurses, students to speak to school admin or families to remote visit isolated patients.

On-the-move **temperature-screening and mask-checking** ensure that visitors and staff are protected throughout your workplace. Keep on top of the situation, and respond quickly, using real-time reporting, information and alerts.



#### CTE SmartRanger robot: screen and clean outdoors, and call for help



The CTE SmartRanger robot can work for 24 hours uninterrupted, screening and cleaning your outdoor spaces quickly. It does so with safety and efficiency in mind. It's self-driving, so you can program it to cover your sites after hours, or during quieter times.

It keeps your workplace safe by **broadcasting safety messages**, **and by checking people's body temperatures and mask-wearing**. It also reports data back and alerts your team.

The CTE SmartRanger robot also has a one-button emergency call connected to your control room for passers-by to call for help using voice and video.

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## Useful wherever you work

There's a CTE SmartSafe robot that's right for your organisation. They can adapt easily to a wide variety of work and public spaces, from the largest to the smallest.

All of the CTE robots send and receive information securely through 5G / 4G / WiFi multi-standard, high bandwidth, low latency network access. So your health and safety teams can respond quickly and alert others when necessary.



Hospitals, residential lobbies, industrial spaces Airports, transportation hubs, public transport stations Government buildings, libraries, schools

Parks, campuses, outdoor transport hubs

# Detailed specifications of CTE SmartSafe robots

	CTE SmartClean	CTE SmartPatrol	CTE SmartScreen	CTE SmartRanger
Technical specifications	Dimension: 55cm X 55cm X 130cm~190cm Weight: 80kg Speed: 1m/s (3 levels) Turning radius: spot-turn Location accuracy: ±2 cm Chassis: double shock absorber Battery life: ≥8 hours Charging duration: ≤4 hours Operating temperature: 0°C - 40°C	Dimension:1257mm X 537mm X 537mm Weight: 60KG Thermal imaging temperature range:-20°C ~150°C Battery life: ≥8 hours Operating temperature: 0°C - 40°C	Dimension:1393mm X 630mm X 537mm Weight: 45KG Color: white, silver Head screen: 11.6-inch touch screen 1920x1080 Motion speed: 0.3m/s, 0.5m/s, 0.7m/s Operating temperature: 0°C - 40°C	Dimension: 1540mm X 890mm X 1930mm Weight:300KG Material: alloy steel plate + ABS Operating speed: rated speed of 1m/s, maximum speed of 1.5m/s Passing capacity: ≤80mm(height), ≤200mm(width) Wading depth: ≤100mm Protection level: IP55 Operating temperature: -40°C - 70°C
Specifications of sensors and capabilities	Max disinfection efficiency: 60m³/h UV light power: 4x14W Radiative illumination value: 4x40uW/cm² Ozone disinfection: available Infrared thermometers: 10 people max at a time Infrared thermometer accu- racy: ≤ 0.5°C Assets inventory: available Platform elevating: available	Infrared temperature detection accuracy:±0.5°C Identification accuracy without masks:99% Storage quantity of disinfecting solvent: 5L*2 Integrated camera: RGB-D depth camera Positioning cruise: high precision lidar, pressure sensor, ultrasonic sensor	Head sensor: 6+0 microphone array Waist sensor: Depth camera, electronic skin on arm, pressure sensor on the back of hand Chassis sensor: ultrasonic sensor X6, infrared sensor X9, lidar X1 9 axis gyroscope sensor X1, temperature and humidity sensor X1 Infrared temperature detection accuracy:±0.5°C	Camera: Main camera & thermal imaging temperature measuring camera Positioning cruise: 3D lidar, 2D Lldar, left/right loop camera, front/back loop camera Storage quantity of disinfecting solvent: 18L Support emergency on-click help

# **CTE Key facts**

Extensive European-Asia Network – transiting TMP, TEA, TEA2, TEA 4, CR2, TSR, SMW3, SMW4 and SMW5 cable systems

World's largest 4G LTE FDD mobile operator (323 million mobile subscribers)

World's largest broadband operator (150 million subscribers)

Owns and operates China's largest optical fibre network: over 83,000 km long, covering 70% of China's territory and connecting all Chinese cities

Owns and operates ChinaNet, China's largest Internet network

Owns and operates China's largest MPLS VPN network, based on our next-generation, carrier-class, IPv6capable Internet backbone network

Primary service provider in all 21 southern provinces in China

Owns comprehensive trans-Pacific cable systems, including China-U.S., Japan-U.S., SEA-ME-WE3 in APCN2, SMW3, SMW5, FASTER, Flag, TAE, etc.

International bilateral connectivity to 100+ countries

More than 670,000 professionals employed around the world

Ranked #141 on Fortune's Global 500 in 2019

# Contact us today

# 100% bespoke technology solutions

When you partner with us, everything we do is geared to the specific needs of your business. You get a tailored solution that delivers the performance, flexibility and capabilities you demand. We can help you:

- Protect your frontline staff and your customers with a range of robots to keep your organisation clean and safe.
- Help people stay alert with real-time screening, plus reports to health and safety, and information for everyone on site.
- Discover our value-added solutions that could future-proof your connectivity and ICT needs.

# Who is CTE?

For companies who want to grow their businesses or establish a presence in China, or for Chinese enterprises that wish to expand overseas, CTE provides integrated telecoms and communications services.

CTE is a wholly owned subsidiary of China Telecom Global (CTG), the international arm of China Telecom. CTE's unrivalled knowledge of the Chinese market, and regional offices across Europe, make CTE an ideal partner for European and Asian businesses, including European multinational enterprises, Chinese enterprises in Europe, carriers, telecom service providers as well as Europe-based Chinese consumers.

CTE seamlessly connects your global business to the world's largest single marketplace. Our European-Asia Network has more terrestrial and submarine routes than any of our competitors, and domestically China Telecom owns the largest digital network in China. This results in superior lower latency, greater diversity and improved resilience when accessing business applications to and from China. CTE can bring all your international communications needs under one global contract, and give you the peace of mind that comes from knowing you're in the safe hands of industry experts.

### Find out more by calling CTE on +44 (0) 20 7537 7156 Or email us at emea.marketing@chinatelecomglobal.com



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