

Tenda



CH7-WCA

5MP Outdoor Wi-Fi Pan/Tilt Camera



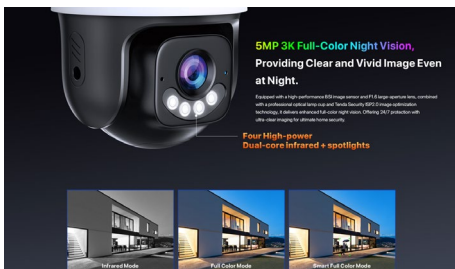
CH7-WCA

5MP Outdoor Wi-Fi Pan/Tilt Camera

Description

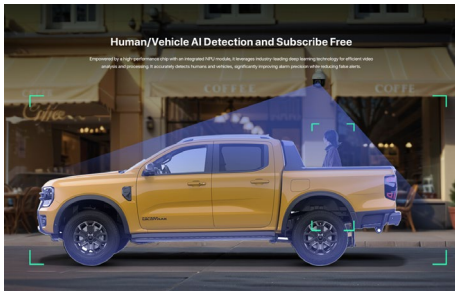
The Outdoor Wi-Fi Pan/Tilt Camera CH7-WCA is a high-performance outdoor surveillance camera that integrates 5MP resolution video, 360° visual coverage, Full-Color night vision, full-duplex two-way audio, human detection, vehicle detection, sound and light alarm functions. The product is mostly used for outdoor monitoring scenarios such as courtyard, farms and shops, etc. The users can access the video via wireless or wired connection to the Internet.

Main Features



5MP 3K Full-Color Night Vision, Providing Vivid Image Even at Night

Equipped with a high-performance BSI image sensor and F1.6 large-aperture lens, combined with a professional optical lamp cup and Tenda Security ISP2.0 image optimization technology, it delivers enhanced full-color night vision. Offering 24/7 protection with ultra-clear imaging for ultimate home security.



Human/Vehicle AI Detection and Subscribe Free

Empowered by a high-performance chip with an integrated NPU module, it leverages industry-leading deep learning technology for efficient video alerts and detects humans and vehicles, significantly improving alarm precision while reducing false alarms.



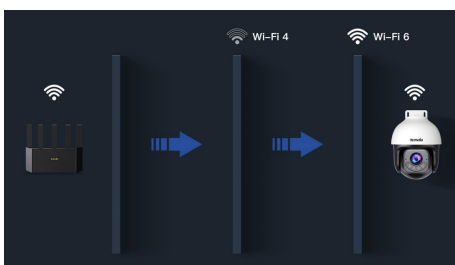
360° Panoramic Coverage Omnidirectional Protection

Featuring a dual-gimbal design, it supports flexible rotation in all directions for panoramic, blind-spot-free surveillance. With the ability to preset 6 key positions and a timed automatic patrol scan function, it ensures precise coverage of every corner, even in large yard settings, completely eliminating surveillance blind spots.



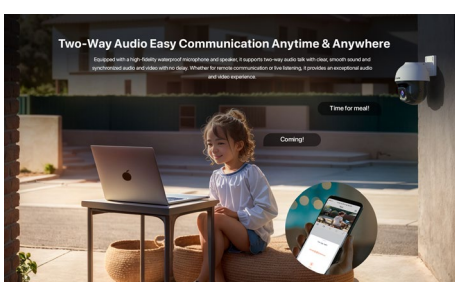
Smart Human Tracking, Audio & Light Alert

When a person enters the video surveillance area, the camera intelligently recognizes human features and automatically activates tracking mode. It simultaneously triggers an audio & light alert and sends real-time alarm notifications to the mobile app, allowing you to keep track of the situation on-site at any time.



Next-level Wi-Fi 6 Technology, Stable and Smooth Video

With the latest Wi-Fi 6 technology, built-in special antenna for signal enhancement, it offers better anti-interference performance and lower latency compared to Wi-Fi 4, allowing your security range wider.



Two-Way Audio Easy Communication Anytime & Anywhere

Equipped with a high-fidelity waterproof microphone and speaker, it supports two-way audio talk with clear, smooth sound and synchronized audio and video with no delay. Whether for remote communication or live listening, it provides an exceptional audio and video experience.

Main Features



Sharing Camera to Your Family to Protect Safety Jointly

Enhance safety by sharing the camera with your family. Each member can check home situations and collaborate to ensure family security.



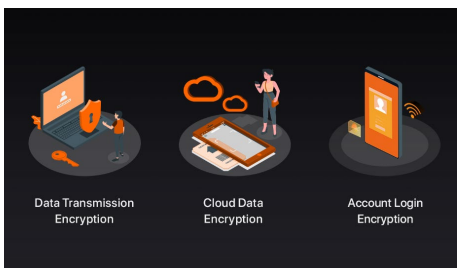
Waterproof and Dustproof

With waterproof and dustproof design, the camera can withstand rainy, sunny, stormy, and even snowy weathers.



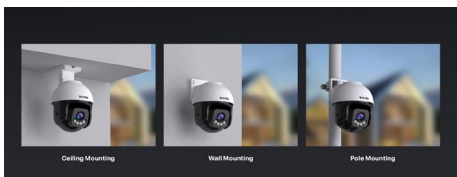
Three Storage Options

The video can be stored in local Micro SD card, cloud and NVR/NAS. Even a vandal accident happens to your devices, you can still retrieve videos based on cloud recording.



Triple Encryption Ensures Data Security

Triple encryption protection is applied to data transmission, cloud storage, and account login to ensure the security of your security data and personal privacy.



With Adjustable Bracket, Support Multiple Mounting Methods

Equipped with an adjustable bracket, the camera can be mounted on the ceiling and wall with screw, or mounted on the pole with strap.

Technical Specifications

Camera	
Image Sensor	1/3" Progressive Scan CMOS sensor
Day & Night	ICR type
Bracket Angle Adjustment	/
Lens	
Focal Length	4mm
Aperture	F1.6
FOV	Horizontal FOV: 79.1°, Vertical FOV: 43.3°, Diagonal FOV: 94.9°
Illuminator	
Supplementary Light	4 IR Lights, 4 Spotlights
Supplementary Light Distance	Up to 30 m/100 ft (depending on environment)
IR Wavelength	850nm
Night Vision Mode	Smart Mode, Full Color Mode, Black & White Mode
Video	
Video Encoding Format	H.265, H.264
Main Stream Resolution	2880 × 1620, 2560 × 1440, 2304 × 1296, 1920 × 1080, 1280 × 720
Sub Stream Resolution	640 × 360
Frame Rate	1-30fps, Default 20fps
Bit Rate	512kbps -- 4096kbps
Bit Rate Control	CBR,VBR
Audio	
Audio Encoding Format	G.711A, G.711U, AAC
Audio Sampling Rate	8 kHz
Audio Communication	Two-way Audio, Voice Input
Image	
Image Enhancement	DWDR, BLC, HLC, 3D DNR
Privacy Mask	4 Areas

Technical Specifications

Network	
Ethernet Port	1 RJ45, 10Mbps/100Mbps auto-negotiation Ethernet port
ONVIF	Support
Protocols	TCP/IP, UDP, ICMP, HTTP, HTTPS, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, ARP, WebSockets
Web Browser	Chrome, Edge, Opera
Pan&Tilt	
Pan Movement Range	0°-355°
Tilt Movement Range	0°-90°
Preset	6
Patrol	Panoramic Patrol, Preset Patrol
Wi-Fi	
Antenna	Internal antenna
Wireless Standard	IEEE 802.11 b/g/n/ax
Transmission Rate	Up to 287Mbps
Channel Width	20/40 MHz
Modulation	DSSS/OFDM/OFDMA
Frequency Band	2.4GHz: 2412MHz-2472MHz(CH1-CH13)
Transmit Power	2.4GHz: <0.1W(EIRP)
Security	64/128-bit WEP, WPA/WPA2, WPA-PSK/WPA2-PSK, WPA3-SAE
Alarm	
Smart Detection	Motion Detection, Tampering Detection, Human Detection, Vehicle Detection
Smart Linkage	Sound&light Alert, Human Tracking
DIY Audio	3 Customized Audios
Interface	
Audio Input	Built-in MIC
Audio Output	Built-in Speaker
Storage	Built-in Micro SD Card Slot, Up to 512 GB
Reset Button	Support

Technical Specifications

LED Indicator	Dual Color(red & blue) LED Indicator
General	
Power	12V DC,1A,Ø5.5mm&Ø2.1mm Power Plug
Material	Plastic
Product Dimension	146mm x 120mm x 120mm (5.7" × 4.7" × 4.7")
Package Dimension	251 mm x 167 mm x 131 mm (9.9" × 6.6" × 5.2")
Product Weight	370g (0.82lb)
With Package Weight	820g (1.81lb)
Protection Level	IP65
Installation Method	Wall Mounting, Ceiling Mounting, Pole Mounting
Certification	CE, RoHS, FCC, RCM, UKCA
Temperature	Operating Temperature: -30°C ~ 60°C (-22°F ~ 140°F) Storage Temperature: -40°C ~ 70°C (-40°F ~ 158°F)
Humidity	Operating Humidity: 10% ~ 95% RH (non-condensing) Storage Humidity: 3% ~ 95% RH (non-condensing)
Package Contents	Camera Power Adapter (cord length: 3m) Installation Template Mounting Bracket Mounting Accessories Kit Waterproof Kit Quick Installation Guide

SHENZHEN TENDA TECHNOLOGY CO.,LTD.

Tenda Technology Bldg.Int' l E-City,
#1001 Zhong Shan Yuan Rd.,Nanshan District,She nzhen China.

E-mail:support@ tenda.com.cn

Tel:+86-755-2765 7098

Fax:+86-755- 2765 7178

Specifications are subject to change without notice. Copyright ©2025 SHENZHEN TENDA TECHNOLOGY CO.,LTD.
All rights reserved. Tenda is the trademark of SHENZHEN TENDA TECHNOLOGY CO.,LTD.
All other brand names mentioned herein are the trademark or registered trademarks of their respective holders.

