#### Datasheet

# Wireless Long-Range Transmitter for CCTV IP Camera

WI-CPE521



#### Overview

WI-CPE521 is designed to provide a cost-effective wireless network solution for video surveillance and data transmission. Via the embedded 12dBi omni antenna, it provides good diversity coverage and better noise immunity effect, thus heightening the performance of long-distance, outdoor connectivity even though the environment is flooded with many 5GHz wireless equipment.

Professional performance and user-friendly design make WI-CPE521 an ideal choice for business and CCTV applications.

#### **Features**

#### Long-Distance Data Transmission Up to 2km

With a high-performance 12 dBi omni antenna, WI-CPE521 long-distance wireless network transmission can be up to 2km. Besides, it provides an efficient way to pick up and maintain a stable signal for the wireless network.

#### **Professional Outdoor Waterproof Design**

Equipped with a durable IP65 waterproof enclosure and high-quality hardware design, WI-CPE521 can work in almost any climate, which ensures all-weather stability.

#### PTP/PTMP

WI-CPE521 supports two networking modes PTP and PTMP(point-to-point and point-to-multipoint), which flexibly suits different outdoor network solutions.

#### 24V PoE Input Support

Simplifying installation by transmitting power and data over a single Ethernet cable, eliminating the need for additional power outlets.

#### Wi-Tek Cloud Management Platform

Wi-Tek Cloud's quick configuration provide reliable performance, visual management, and real-time monitoring, enhancing the efficiency of device management.



## Specifications

Model	WI-CPE521	
Hardware Features		
Version	V2	
Memory	DDR2: 64MB Flash: 8MB	
Interface	1*10/100Mbps RJ45 Port 1*Reset Button	
PowerSupply	24V Passive PoE Input	
Package Dimension(L x W x H)	645*105*85 mm	
Product dimension	556*68mm	
product weight	0.75kg	
package weight	1.47kg	
ESD Protection	Contact discharge: 6kV, Air discharge: 8kV	
Surge Immunity	Common mode: 4kV, Differential mode: 4kV	
IP Level	IP65	
Wireless Features		
Standards	IEEE 802.11a/n	
Data Rates	300Mbps	
MIMO	2 x 2	
Antenna	12dBi	
Half Power Beamwidth (Typ.)	Horizontal: 360°, Vertical:11°	
Frequency	5.18 ~ 5.825GHz  *Please follow national regulations to select the appropriate frequency.	
Channel Width	20/40MHz	
Transmit Power	Up to 27 dBm (country dependent)	
Recommend Distance	2km	
Software Features		
Wireless Mode	Basic Station/CPE/Repeater/WISP	

Network	LAN: Static IP, Dynamic IP, PPPoE Client WAN(WISP mode): Static IP, Dynamic IP, PPPoE Client DHCP Server(Only WISP mode) VLAN: IEEE 802.1Q VLAN Passthrough	
Wireless	Wireless Disable OR Enable  Modify default SSID  SSID Hiding  Wireless Security: WPA-TKIP, WPA2-AES, WPA1/WPA2-Mixed, WPA/WPA2-Enterprise	
RF Parameter	Adjustable Country Auto Channel Width Selection Automatic Frequency Selection Adjustable Transmission Power Max Associated STA (default: 128) Weak Signal Rejection Threshold(default: –95dBm) User Isolation(default: disabled) Supports Wi–Fi Multimedia (WMM) RTS/CTS Threshold (default: 2347)	
Advanced	Spectrum Scheduled Reboot Ping Watchdog NTP Server	
Status Monitoring	Base Info: LAN/WAN Info, Wireless Info, System Info Radio Status Real Time Flow Chart Wireless Terminal Station SSID List DHCP Client(For WISP mode) ARP Table Routing Table	
Management	Quickly scan devices by discovery tools  Web-based management by locally	
System Tool	PING, TRACERT, Speed Test	
Environment	Operating Temperature: $-40^{\circ}\text{C} \sim 70^{\circ}\text{C}(-40^{\circ}\text{F} \sim 158^{\circ}\text{F})$ Storage Temperature: $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}(-40^{\circ}\text{F} \sim 185^{\circ}\text{F})$ Operating Humidity: $10\% \sim 95\%$ (non-condensing) Storage Humidity: $5\% \sim 95\%$ (non-condensing)	
Others		
Certification	CE, FCC, RoHS, UKCA, RCM	

### **Package Contents**

Welcome to order our products. After purchasing, you will receive:

Items	Quantity
WI-CPE521	1 pcs
24V Passive PoE Adapters	1 pcs
Pole Mount Kits	1 pcs
Quick Installation Guide	1 pcs



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Cloud Management



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