Tenda

All for better networking.

O4

5km Point to Point Outdoor CPE

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What it does

O4 5GHz Long Range Outdoor CPE is designed to WISP CPE solutions and long distance wireless network solutions for video surveillance and data transmission. It features with 14dBi directional antenna to provide an efficient way to pick up and maintain a stable signal for a wireless network. Adopt of auto-bridging technology,two CPE can connect to each other automatically to make it easy to setup.

Key Features

- 5GHz 11n 300Mbps
- 14dbi directional antenna
- IP64 waterproof enclosure
- 6000V Lightning Protection
- AP,Station,WISP operating mode supported
- Up to 60 meters of flexible deployment with included PoE Injector

Main Features

5km+ transmission Range

O4 adopts of independent power amplifier and 14dBi directional antenna to provide an efficient way to pick up and maintain a stable signal for a wireless network up to 5km.

Super channel-Extended Frequency

O4 adopt of Qualcomm AR9344 chipset and special software mechanism optimization for radio driven architecture to offer extended frequency support. This feature is designed to help users get out of the congested, unlicensed 5GHz band and into clean spectrum.

TD-MAX-TendaTDMA proprietary protocol

TD-MAX is Tenda TDMA (Time Division Multiple Access) proprietary protocol to improve performance and capacity for wireless WISP outdoor application scenarios.
In outdoor enviroment, the CPE use highly directional antennas to connect to the Basestation from distances that can span several kilometers. the CPE can't sense each other, they become "hidden nodes" and cannot coordinate access to the wireless channel. Thus the Basestation experiences frequent collisions from stations transmitting simultaneously. As the network scales, these collisions build up exponentially, increasing latency and lowering throughput.
With TD-MAX, it coordinate all the data transmission and allocates time to active clients to provide greater noise immunity performance when compared to the conventional 802.11 CSMA/CA (Carrier Sense Multiple Access / Collision Avoidance) protocol.

10/20/30/40MHz Channel Bandwidth for better throughput

O4 apply special optimization in software for register parameter to deliver 10/20/30/40MHz channel bandwidth option. It provides extra 10MHz and 30MHz channel bandwidth option to consumed according applycation scenarios.
When you choose 30MHz channel bandwidth option, it can increase throughput for noisy environments. When you choose 10MHz channel bandwidth option, it can increase the number of available, non-overlapping channels, so networks can scale better.

Main Features

Channel shift to avoid interferrence

O4 provide Channel Shift feature to offset the central frequency 5MHz upper. It can avoid interference from nearby AP and deliver higher throughput.

Multiple Application Scenarios

Long-Distance Wireless Connection
One work as AP mode and another work as Station mode to create a long distance wrieless connecton for video surveillance and data transmission.

WISP(Client+Router) Mode
Wirelessly connect to WISP station/hotspot to share Internet to local wireless and wired network.

CPE Assistant-Centralized Management Platform

O4 equipped with centralized management software that helps users easily manage all the devices in their network from a single PC - CPE Assistant. Functions like device discovery, status monitoring, firmware upgrading, and network maintenance can be managed using CPE Assistant.

Professional Outdoor Design

O4 adopt of IP64 weatherproof and 6000V Lightning protection design, It can withstand the harsh environmental conditions such as sunshine, rainfall or extremely low/high temperature environment

Specification

Product Information	
Model	O4
Dimensions	270*94.86*67.5mm
Deployment	Pole Mount/Wall Mount
Application Scenarios	WISP CPE, Data transmission and Long range video surveillance
Wireless Features	
Frequency Range	5GHz
Compliant Standards	IEEE 802.11a/n
Private TDMA Protocol	TD-MAX
Maximum Wireless Rate	300Mbps
Interfaces	1*10/100Mbps Ethernet Port
Antennas Gain	14dbi
Antenna Beamwidth	Horizontal: 30° Vertical: 30°
Reset Button	1
GND	1
Power Consumption	8.5W
Waterproof Level	IP64
LED indicator	PoE/LAN,LED1,LED2,LED3
Power Method	24V0.5A Passive PoE
Lightning Protection	6000V
Passive PoE	Passive power over ethenet via PoE/LAN (+4,5pins; -7,8pins)
	Voltage range: 21-25V DC
Receiver sensitivity	MCS0: -96dbm
	MCS7: -72dbm
Software Features	
Operating mode	AP/Station/WISP/P2MP/WDS Repeater/Router
Enable/Disable Wireless Radio	Support
SSID Hidden	Support
Wireless Client isolation	Support
SSID Isolation	Support
Channel Bandwidth	10/20/30/40MHz
Client Limitation For SSID	Support
Wireless Access Control	Support
Weak Signal Client Limitation	Support
Transmission Power	Adjustable power by 1dBm

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Specification

Software Features	
WMM Capable	Support
APSD Capable	Support
Wireless Security	64/128 WEP,WPA-PSK,WPA2-PSK,WPA&WPA2-PSK,WPA,WPA2
Transparent Bridge	Support
VLAN Tagging for SSID	Support
DHCP Server	Support
VPN Pass-Through	PPTP,L2TP
Remote Web access	Support
Schedule Reboot	Support
Page Timeout	Support
Ping Watchdog	Support
Dyndns	noip, dyndns.org
Network Diagnoses	Ping, Traceroute, Signal Scan
Time&Date Setting	Support
Firmware upgrade	Support
Backup/Restore Configuration	Support
Username Managerment	Support
System Log	Support
Managed By Controller	PC Software -- CPE Assistant

Others	
Package Contents	"1*5km Point to Point Outdoor CPE O4
	1*PoE Power Adapter
	1*Quick Installation Guide"
Operating Temperature	-30℃ ~ 60℃
Storage Temperature	-40℃ ~ 70℃
Operating Humidity	10%~90% non-condensing
Storage Humidity	10%~90% non-condensing
Default login IP	192.168.2.1
Default Login Username	admin
Default Login Password	admin
Certifications	FCC/CE/RoHS