WNOR900

# 300Mbps Outdoor CPE

Model: WNOR900

## Description:

WNOR900 is an 2.4GHz 300Mbps high power outdoor CPE/AP with LED display to show and configure it Channel, IP address and Signal Strengt. Comply with IEEE 802.11b/g/n standard, adopt Qualcomm QCA9531chipset, 14dBi dual polarized high gain antenna, 1000mW/29dBm high power, the transmit/receive wireless distance more than 3500 meters.

It support Wireless AP, Gateway, WISP, Wireless Bridge, WDS operation mode, effective solution for PTP, PTMP application and outdoor long range Wi-Fi coverage application.What's more, it is easy to setup CPE-830D's IP address, RF Power, Channels by setup the switches on product, no need to access into GUI, avoid the complex setup program, simple to check the working status.

And it support special frequency from 2.312GHz to 2.4835GHz, total 27 channels, together with Wi-Fi channel analysis tool, it make this outdoor CPE choose the best channel to avoid the Wi-Fi Interference, to guarantee the stable wireless connection.

CPE-830D with ABS waterproof, dustproof and sunscreen shell, temperature adaptive; Then PCB board support ESD protection, Meantime, it support Power over Ethernet, support passive PoE, easy in setup even no power socket nearby, ideal for outdoor use;

Besides that, CPE-830D with LED signal lights to show signal strength, easy to find a suitable place of outdoor CPE, then firmware comply with AC controller system and Cloud Management System, which helpful in central management and data setting, to implement Advertisement and authentication function, save much human work and cost, more professional in outdoor wireless networking solution.

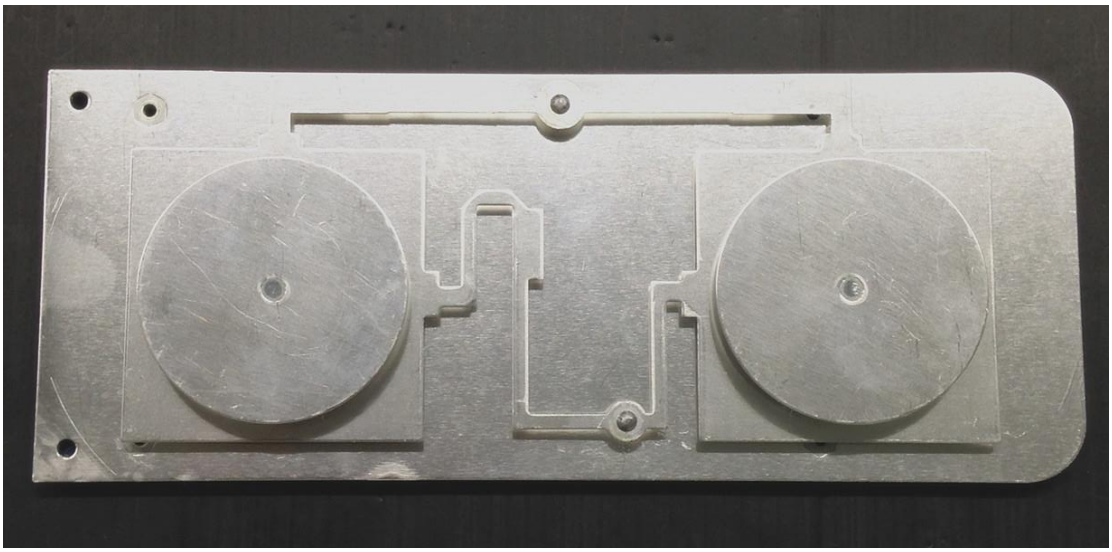
## Packing and Accessory:

## Specification:

| | |
|---|---|
| Hardware: | |
| Chipset | Qualcomm 9531 |
| Wireless | 802.11N, 2T2R 300M MIMO Technology |
| Memory | 64MB DDR2 RAM (128MB available by extra cost) |
| Flash | 16MB |
| Interface | 2 *10/100Mbps RJ45 Port, support 12~24V PoE |
| | 1 * Reset Button |
| | 1 * DC Injector, 12V/1A |
| | 1 * LED display |
| | 1 * F(Function) switch button |
| | 1 * S(Select) button, press it to setup WDS PTP/PTMP connection |
| Antenna | 14dBi Panel Antenna |
| LED Light | POWER Wi-Fi WAN LAN S1(GPIO9) S2(GPIO14) S3(GPIO11) S4(GPIO12) |
| Size | 260mm * 85mm * 45mm |
| Power | 12V(POE 24V)/1A;110V/220V |
| RF Data | |
| RF Data | 802.11b/g/n: |
| | 2.312GHz to 2.4835GHz |
| | Korea, Japan, ETSI, FCC, Debug |
| Modulation | OFDM = BPSK,QPSK, 16-QAM, 64-QAM |
| | DSSS = DBPSK, DQPSK, CCK |
| Data Rate | 300Mbps |
| Receive Sensitivity | 802.11n: @MCS7:25±2DB, @MCS0:27±2DB.<br>802.11g: @54M:26±2DB, @6M:28±2DB.<br>802.11b: @11M:27±2DB, @1M:29±2DB |
| RF Output Power | 802.11n: -70dbm@MCS7, -88dbm@MCS0.<br>802.11g: -72dbm@54Mbps, -88dbm@6Mbps.<br>802.11b: -85dbm@11Mbps, -94dbm@1Mbps. |
| EVM | 802.11n: ≤-28 DB<br>802.11g: ≤-25 DB<br>802.11b: ≤-10 DB |
| PPM | ±20ppm |
| End User | 64 |

| | |
|---|---|
| Firmware | |
| Operation Mode | Wireless AP, Gateway, WISP, Wireless Bridge |
| Protocol/Standard | IEEE 802.3(Ethernet) |
| | IEEE 802.3u(Fast Ethernet) |
| | IEEE 802.11b/g/n(2.4G WLAN) |
| Wireless | Auto-Channel selection |
| | Distance Control (802.1x Ack timeout) |
| | BSSID |
| Security | WEP Encryption-64/128/152 bit |
| | WPA/WPA2 Personal (WPA-PSK using TKIP or AES) |
| | WPA/WPA2 Enterprise (WPA-EAP using TKIP) |
| | Hide SSID |
| System Setting | Web-based configuration (HTTP/Telnet) |
| Firmware upgrade | Upgrade firmware via web browser or TFTP |
| Administration | Admin Password can be configured |
| System monitoring | Status in hand , useful statistic and Event log |
| Log | Supports local logs, logs host, logs file export |
| Reset | Reset or factory defaults |
| Backup | Restore settings & configuration of the device to local file |
| Physical Property: | |
| Temperature | Working: -20°C~55°C |
| | Storage: -40°C to 70°C |
| Humidity | 5%~95% (typical) |
| Package: | |
| WNOR900 unit | |
| PoE Adapter | |
| User Manual | |
| LAN Cable | |
| Setting Accessory | |

## Antenna Data:



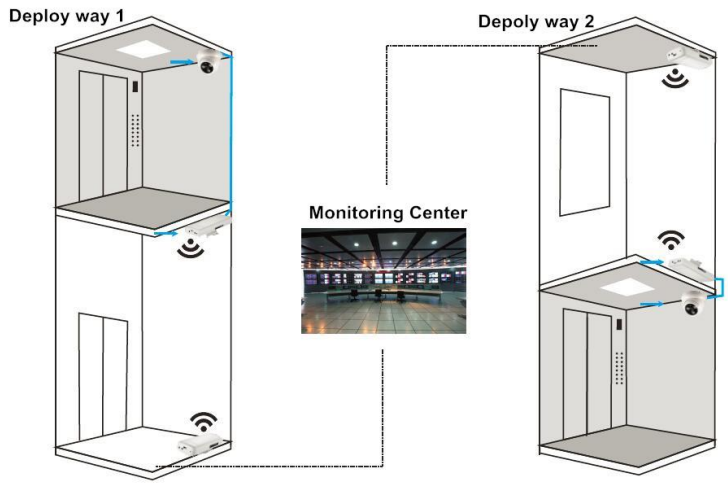
| | |
|---|---|
| Frequency range（MHz） | 2400～2500 |
| Polarization | Vertical and Horizontal |
| Gain（dBi） | 2×14 |
| Half-power beam width（°） | H: 65　V: 30 |
| Front-to-back ratio（dB） | ≥25 |
| Input Impedance（Ω） | 50 |
| VSWR | ≤1.5 |
| Isolation between ports | ≥28dB |
| Cross-polar ratio | ≥15dB@0º　≥10dB@+/-60º |
| Sidelobe suppression for first sidelobe above horizon | 15 dB |
| Maximum input power（W） | 200 |

**Application:**

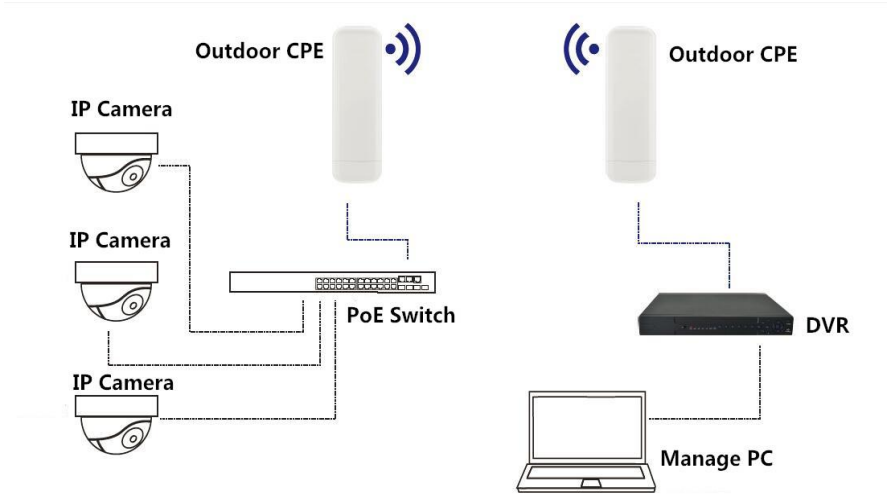
**1. Work with IP Camera for PTP, PTMP, MPTMP connections:**

A. Supply power for IP camera if PTP connection: Outdoor CPE will be powered by PoE adapter, then can supply power for IP camera from CPE's DC port, cost saving and easy setting.

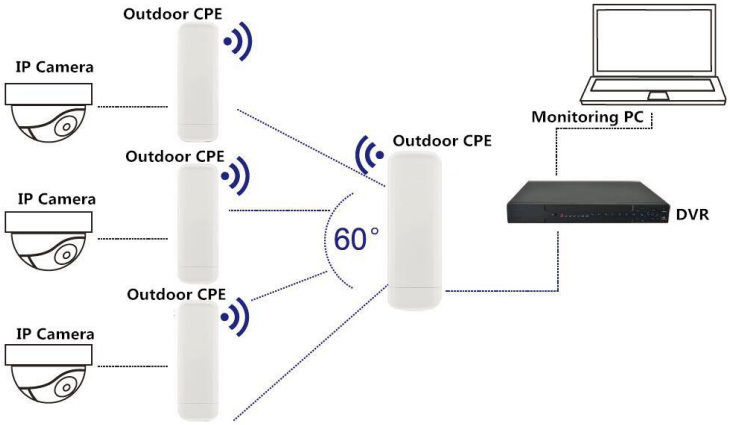

B. Outdoor CPE work with IP camera in elevator.



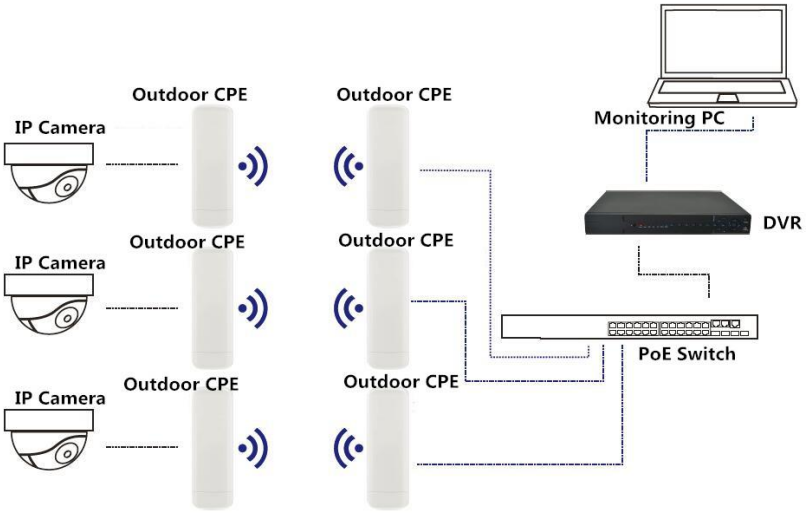

C: Outdoor CPE work with IP Camera in PTP Connection:



D. Outdoor CPE work with IP camera in PTMP Connection:




E. Outdoor CPE work with IP Camera in MPTMP:




**2. Outdoor CPE apply to Wi-Fi Coverage:**