

WA4281 Series

Hardened IP68 Dual Radio Multi-function PoE Wireless Device



Value

- › Dual radio design with wide operating temperature reaches more wireless possibilities
- › One IEEE802.3af PoE/PD port and one PoE/Power forwarding port (7W) for PoE device connections such as VoIP phone and IP camera
- › IP68 weatherproof specification meets various wireless applications



Features

- › WLAN interface supports IEEE 802.11 a/b/g for backhaul and local access with dual radio operation
- › Multi operating modes support: MESH_AP (OLSR), MESH_AP (AODV), AP-Bridge, AP-CB-Bridge, AP-CB- route, CB-CB- route, VLAN-AP, WDS (Repeater)
- › Operating temperature from -30°C to 80°C
- › Power over Ethernet design offers flexibility of Ethernet and local power deployment
- › Supports WEP 64/128, WPA, WPA2 and IEEE802.1x / RADIUS Authentication
- › VLAN Support
- › Supports STP/RSTP to prevent loop
- › Supports rogue AP scan in client bridge mode
- › Supports Web and SNMP V1/V2c/V3 secured management
- › Provides IP table to prevent access from unauthorized IP address
- › Supports bandwidth control for traffic shaping by IP for each client in Route mode
- › Supports QoS over Wi-Fi (WMM) for better performance of differentiated wireless traffic
- › Multiple SSID support

Ordering Information

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* More long-distance antennas are available upon request

High Gian Antenna Options:

Option A : 96G-026XNFX9X 5GHz 18dBi directional patch antenna

Option B : 96G-NXE0Q0300 Low loss cable (3M)



Properties

Frequency	• 5.15 to 5.85GHz
Impedance	• 50 Ω
VSWR	• ≤ 2.0
Gain	• 18dBi
Polarization	• Vertical
Front/Back Ratio	• 30dB
Radiation	• Directional
Operating Temp	• -20°C to 65°C
Pole Diameter	• ∅ 23 to 46mm
Rated Wind Velocity	• 50m/s@mount hight 40m
Dimenstions	• 260mm x 260mm x 44mm

Specifications

Technology	
Standards	<ul style="list-style-type: none"> IEEE802.11 a/b/g , IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX, IEEE802.3x, IEEE802.3af PoE/PD
Forward and Filtering Rate	<ul style="list-style-type: none"> 14,880pps for 10Mbps 148,810pps for 100Mbps
Processing Type	<ul style="list-style-type: none"> Store-and-Forward Half-duplex back-pressure and IEEE802.3x full-duplex flow control

Power	
Input	<ul style="list-style-type: none"> Input Voltage: 48VDC (110-240VAC PSU Provided), PoE Injector and Power Adapter is included within the package IEEE802.3af PoE/PD
Power Consumption	<ul style="list-style-type: none"> Device: Max. 7W (without PoE) PoE power budget: 7W Max.

Mechanical	
Casing	<ul style="list-style-type: none"> Aluminum case IP68
Dimensions	<ul style="list-style-type: none"> 81mm (H) x 240mm (W) x 270mm (L) (3.19" (H) x 9.44" (W) x 10.62" (L))
Weight	<ul style="list-style-type: none"> 2.6Kg (5.75lbs)
Installation	<ul style="list-style-type: none"> Pole mount (The pole mounting kit is included within the package)

Interface	
Ethernet Port	<ul style="list-style-type: none"> One 10/100BASE-TX IEEE802.3af PoE/PD ports One 10/100BASE-TX PoE/PSE port up to 7W
Wireless LAN	<ul style="list-style-type: none"> Standard Compliance: IEEE802.11a/b/g for Wireless LAN IEEE802.11i for Wireless Security IEEE802.1D for Spanning Tree Protocol Transmission Rates: 802.11 b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps TX Power (+1.5dBm / -2dBm) : 802.11a: 22dBm @ 6Mbps 19.5dBm @ 36Mbps 20dBm @ 48Mbps 18dBm @ 54Mbps 802.11b: 20.5dBm Max. 802.11g: 20.5dBm Max.

Wireless LAN	<ul style="list-style-type: none"> RX Sensitivity: 802.11a: -91dBm @ 6Mbps, -72dBm @ 54Mbps 802.11b: -97dBm @ 1Mbps, -88dBm @ 11Mbps 802.11g: -91dBm @ 6Mbps, -74dBm @ 54Mbps Security: IEEE802.1x / RADIUS Client (TTLS, PEAP) Support in AP Mode IEEE802.1x Supplicant (TTLS, PEAP) support in Client Bridge Mode WPA-WiFi Protected Access WPA2 (802.11i) WEP 64,128 bits IP address filtering MAC address filtering Layer2 Isolation VLAN Support
Default Antenna	<ul style="list-style-type: none"> 4.5/7 dBi peak gain , 2.4/5 GHz dual-band Omni-direction, N-type (male)
Wireless Operation Mode	<ul style="list-style-type: none"> OLSR_AP (MESH), AODV_AP (MESH), AP-Bridge, AP-CB-Bridge, AP-CB- Route, CB-CB- Route, VLAN-AP, AP_WDS_BRG, AP4_WDS_BRG

Environment	
Operating Temperature	<ul style="list-style-type: none"> -30°C to 80°C (-22°F to 176°F) tested at 85°C (185°F)
Storage Temperature	<ul style="list-style-type: none"> -30°C to 85°C (-22°F to 185°F)
Ambient Relative Humidity	<ul style="list-style-type: none"> 5% to 95% (Typical)

Regulatory Approvals	
ISO	<ul style="list-style-type: none"> Manufactured in an ISO9001 facility
Emission Compliance	<ul style="list-style-type: none"> CE-R&TTE- EN 300328 & EN 301893 CE/LVD EN60950-1 EN301489-1/17 FCC Part 15B/15C/15E DSPR (RCR STD-33/ ARIB STD-T66/ ARIB STD-T71) JATE (Article 9 & Article 34)
Environmental Test Compliance	<ul style="list-style-type: none"> IEC60068-2-6 Fc (Vibration Resistance) 5g @ 10 - 150Hz, Amplitude 0.35mm (Operation/Storage/Transport) IEC60068-2-27 Ea (Shock) 25g @ 11ms (Half-Sine Shock Pulse; Operation) 50g @ 11ms (Half-Sine Shock Pulse; Storage/Transport) FED STD 101C Method 5007.1 Free fall according to FED STD 101C Method 5007.1 (by CARTON and UNIT), Test Condition: Cross Weight and Drop High

Diagrams

Unit: mm

