

Outdoor Waterproof Long Range Wireless AP

WA211 series

Outdoor IEEE 802.11a/n Wireless AP

WA211series are high performance, 802.11a/n compliant, IP55 waterproof outdoor wireless bridges with wireless coverage reaching up to 2km. Both models feature highly sensitive, high power high gain 2T2R MIMO antennas allowing to reach data rate up to 300Mbps. For congestion control, 5G + auto channel selection is implemented. A web-based utility provides an easy and secure management, as well as firmware upgrade. WA211series is an ideal cost-effective high speed wireless communication solution with multiple operation modes for outdoor surveillance applications.



WA211B

WA211

* Reference photo



Features & Benefits

High Throughput and Extended Range Wireless Communication

- Compliant with IEEE 802.11a/n with 2T2R MIMO and data rate up to 300Mbps
- Long wireless transmission distance up to 2 km
- Supports Base Station, Point to Point, Point to Multiple Points connectivity

Easy and secure management

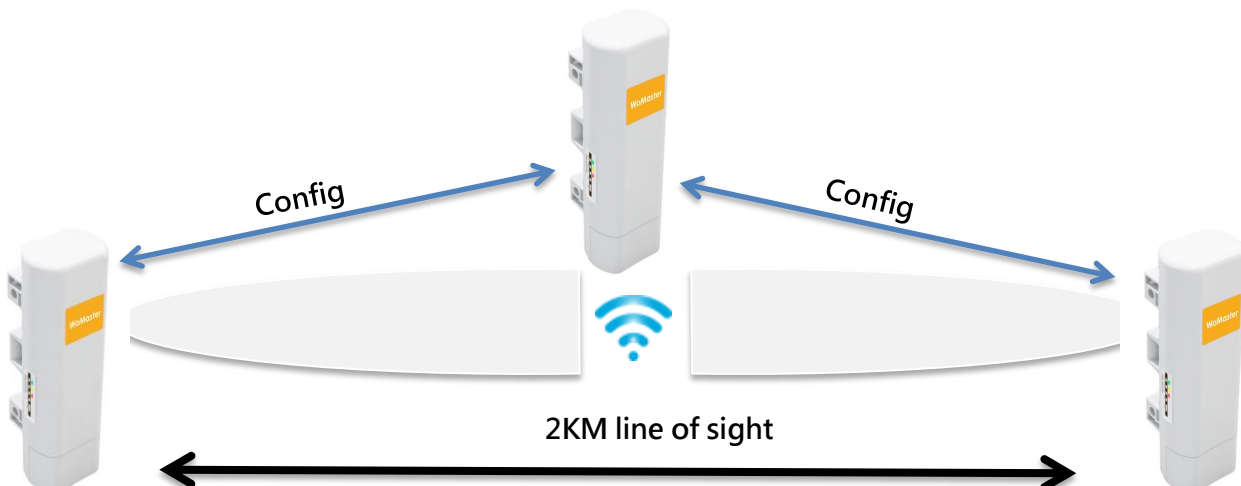
- HTTPs/ SNMP v3/ CLI management
- Built-in WPA, WPA2/ 802.1X/ Firewall security
- Multiple operating modes: Wireless AP/Client/Bridge for different applications

High power, high gain, and smart RF management

- Max. 27dBm output power and -89dBm Rx sensitivity
- 5/13dBi antenna gain
- 5G + auto channel selection to avoid congestion
- IGMP snooping and WMM QoS, ideal for video streaming

Rugged Design for Wayside Surveillance

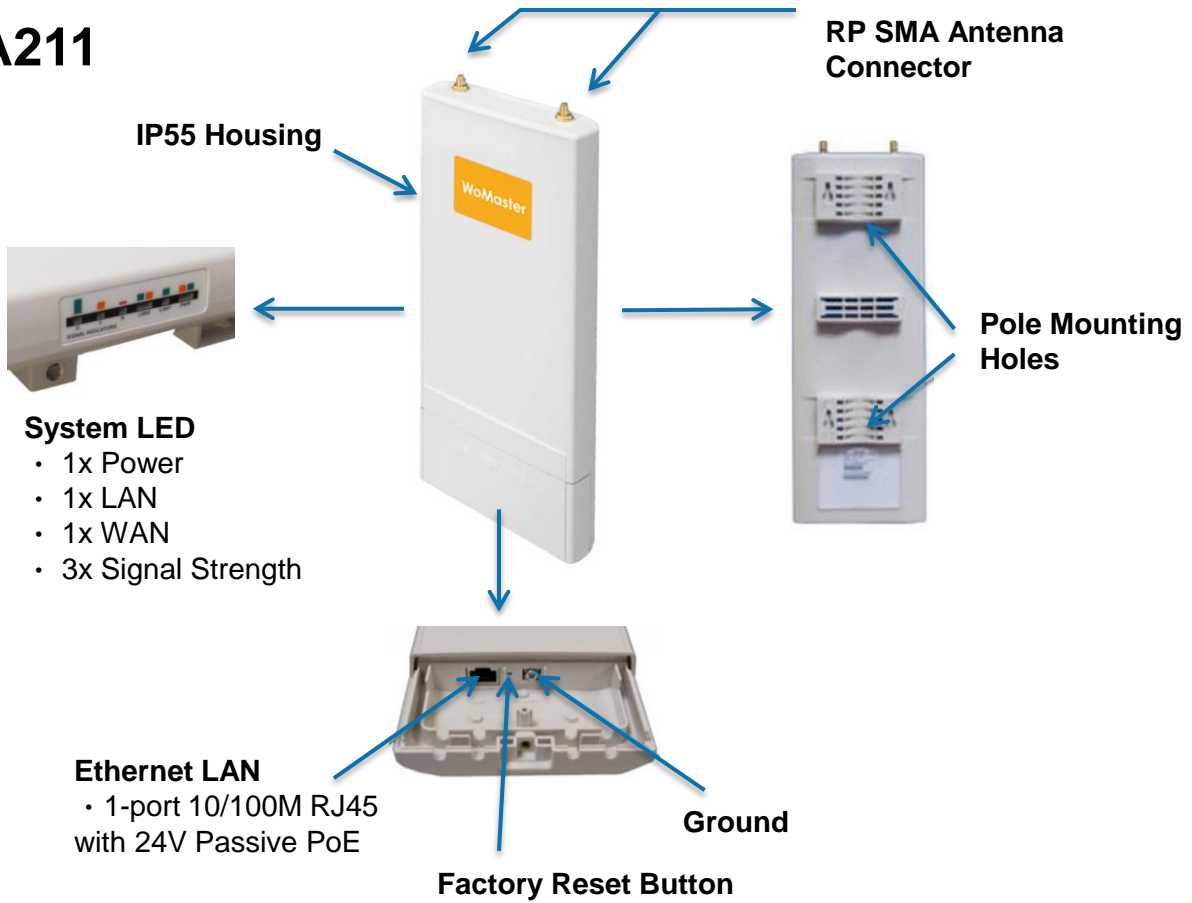
- Outdoor waterproof IP55 enclosure
- 24V Passive PoE and Pole mount installation for wayside surveillance applications
- -20~70°C operating temp. for harsh environments
- CE Marking
- Emission: FCC part 15 sub B, sub E



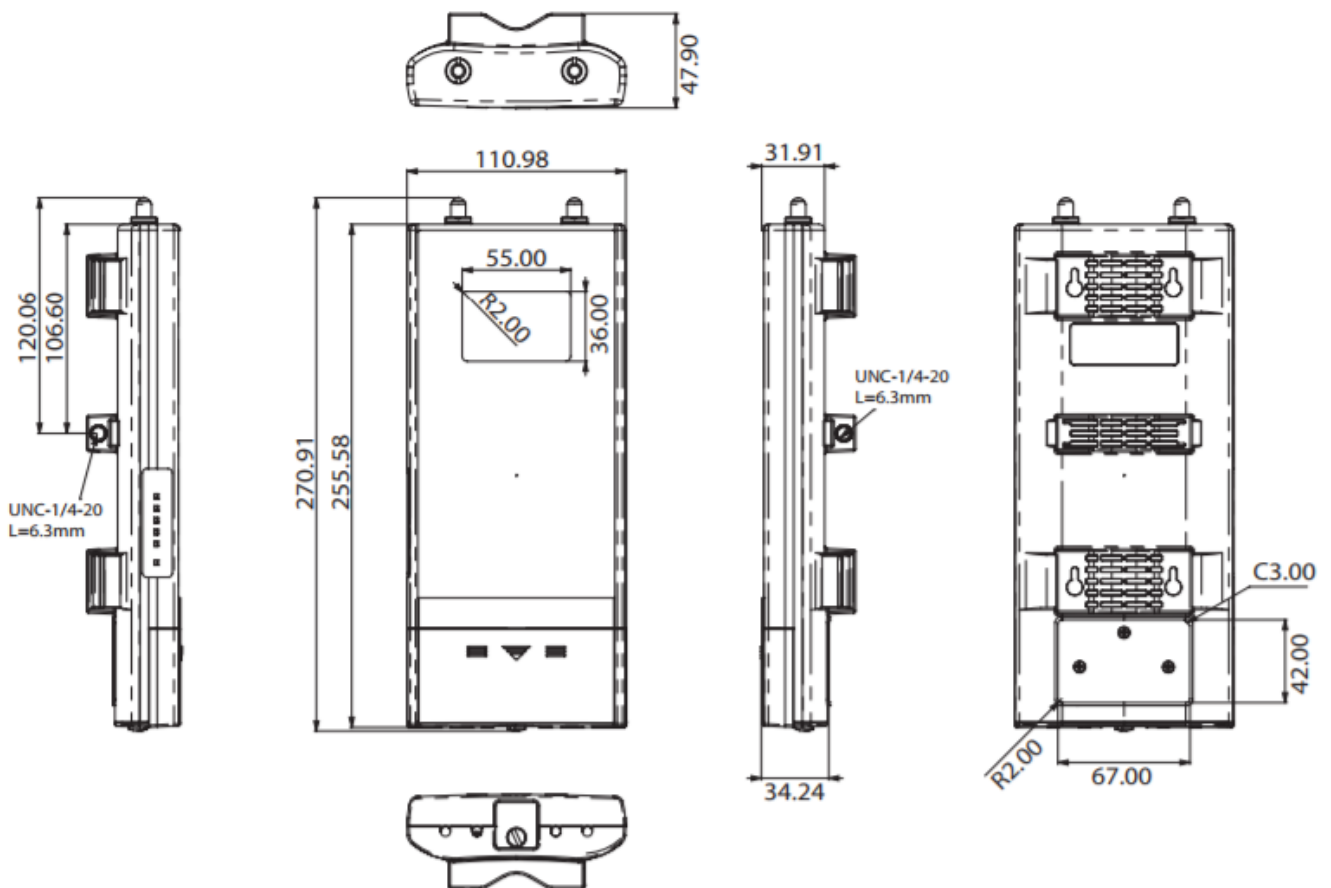


Interfaces

WA211



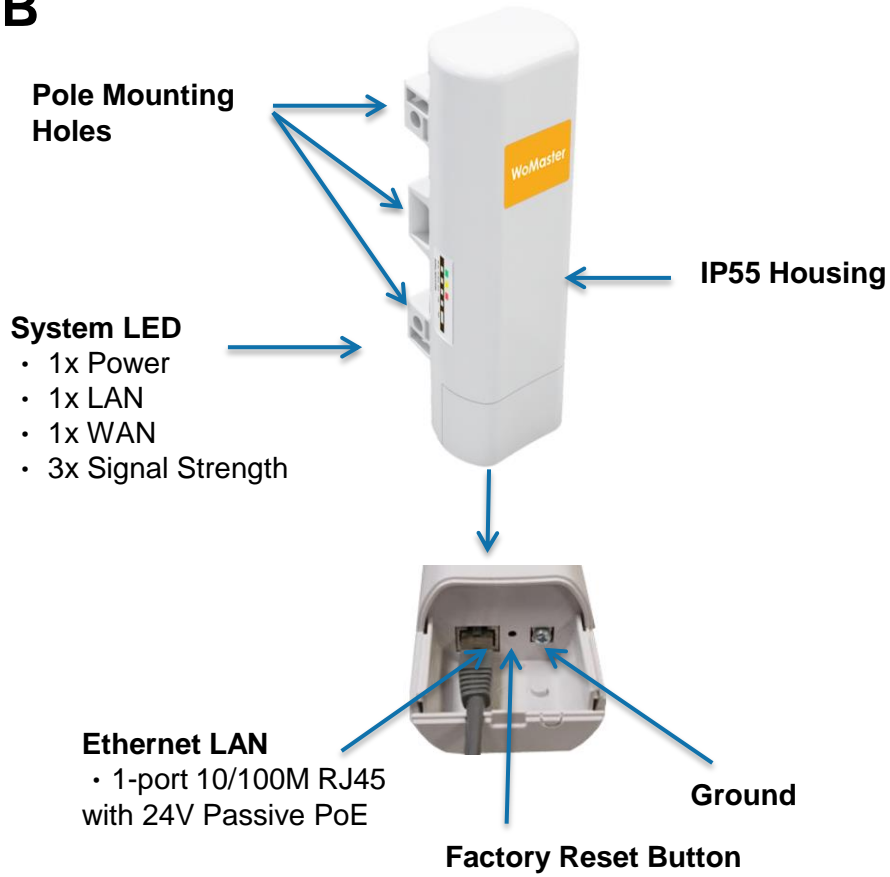
Dimensions



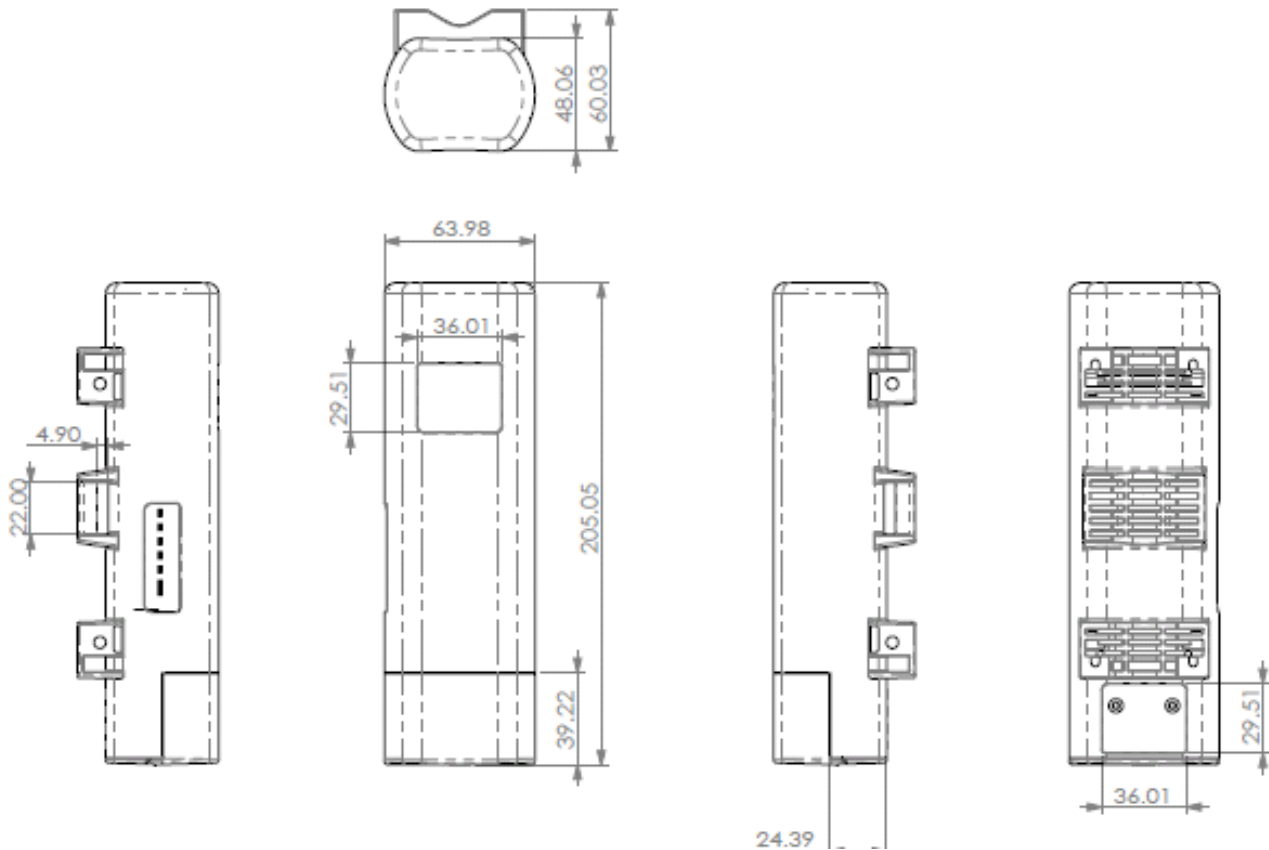


Interfaces

WA211B



Dimensions



Technology	
Standard	IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.11a/n 5G Wireless LAN
Interface	
Ethernet Port	1 x 10/100Base-TX RJ45, Auto Negotiation Passive PoE 24V (Max. 50 meters distance)
System LED	1 x Power: Green ON 1 x LAN: Green ON, Green Blinking in activity 1 x WLAN: Green ON when enabled, Green OFF when disabled, Green Blinking while transmitting data 3 x Signal: Green ON, 3: Excellent, 2: Good, 1: Weak
Reset	Default Settings Reset(over 5 Seconds)
SMA Socket	2 x RP-SMA (WA211)
WLAN	
Radio Type	5G IEEE 802.11a/n
IEEE 802.11 a/n	Modulation: OFDM (BPSK, QPSK, 16 QAM, 64 QAM) Operating Frequency: FCC: 5.15GHz~5.25GHz ; 5.725GHz~5.85GHz NCC: 5.15GHz~5.25GHz ; 5.725GHz~5.85GHz CE: 5.15GHz~5.35GHz; 5.47GHz~5.725GHz Maximum MIMO: 2T2R RF Output Power (1TX): 802.11a: 6~24Mbps: 23dBm (5150~5725MHz) 54Mbps: 20dBm (5150~5725MHz) 6~24Mbps: 20dBm (5725~5850MHz) 54Mbps: 20dBm (5725~5850MHz) 802.11an HT20 MCS0/8: 23dBm (5150~5725MHz) MCS7/15: 19dBm (5150~5725MHz) MCS0/8: 20dBm (5725~5850MHz) MCS7/15: 19dBm (5725~5850MHz) 802.11an HT40 MCS0/8: 21dBm (5150~5725MHz) MCS7/15: 19dBm (5150~5725MHz) MCS0/8: 20dBm (5725~5850MHz) MCS7/15: 19dBm (5725~5850MHz) RF Sensitivity (1RX) 802.11a: 6Mbps: -89dBm 54Mbps: -70dBm 802.11an HT20 MCS0/8: -83dBm MCS7/15: -65dBm 802.11an HT40 MCS0/8: -80dBm MCS7/15: -62dBm Check detail TX/RX information in User Manual

Power Requirement	
Power	DC24V/1A, AC Adapter: 100~240VAC
Power Consumption	Max 12W
Software	
Management Interface	WebGUI, Telnet/SSH, SNMP
Time Management	NTP
Network Management	IPv4, SNMP v1/v2c/v3/Trap, MIBs, DHCP server/ client, System Log
Traffic Management	NAT Routing, Traffic Shaping
Security	Firewall (Inbound/outbound), DMZ, Port Forwarding, HTTPs, SSH
Redundancy Protocol	Spanning Tree Protocol (STP)
WLAN Configuration	WLAN Basic Settings: Radio on/off, 5G 11an Band and Frequency selection, SSID/Multi-SSID configuration, SSID broadcast, VLAN ID, advanced WLAN settings, 802.1X
Mechanical	
Installation	Pole Mount
Enclosure Material	Plastic
Dimension	WA211: 47.65 x 255.6 x 110.98 mm (W x H x D); WA211B: 64 x 205 x 61 mm (W x H x D)
Ingress Protection	IP55
Weight	Around 500g
Environmental	
Operating Temperature & Humidity	-20°C~70°C , 10%~95% Non- Condensing
Storage Temperature	-30°C~80°C
Warranty	2 years
Approval	
Safety	EN 60950-1:2006+A11:2009+A1:2010+A12:2011
FCC	Part15 sub B +ICES003 Part15 sub E
CE	EN 301 893 V1.7.1 EN 301 489-1 V1.9.2/EN 301 489-17 V2.2.1 EN 300 328 V1.8.1:2012 EN 55022 / EN 55024 EN 60950-1:2006+A11:2009+A1:2010+A12:2011 EN 60950-22 Energy Related Products (ErP) Directive / WEEE



Ordering Information

Model Name	Description
WA211-E	Industrial Wireless 802.11an AP/Client/Bridge, IP55, 5dBi External antenna x 2, EU plug
WA211-U	Industrial Wireless 802.11an AP/Client/Bridge, IP55, 5dBi External antenna x 2, US plug
WA211B-E	Industrial Wireless 802.11an AP/Client/Bridge, IP55, 11 dBi +/-2 dBi Internal, EU plug
WA211B-U	Industrial Wireless 802.11an AP/Client/Bridge, IP55, 11 dBi +/-2 dBi Internal, US plug
Package List	
1 x Product Unit	
2 x Default Antennas, 5dBi (WA211)	
2 x Pole Mounting Rings (WA211) 1 x Pole Mounting Rings (WA211B)	
1 x 24VDC Power cord (EU/US) & PoE Injector	
1 x Ferrite Suppression Core	
1 x Grounding Wire	
1 x Quick Installation Guide	



Optional Accessory

Item	
A-WLAN-6-NM	Wi-Fi Antenna, Wi-Fi 2.4/5GHz dual band Omni-directional 4/6dBi, N-type male
C-RF-C2-NF_RSM-2M	RF cable, N-type female to RP-SMA male, CFD200, 2M