

RG-AP630(CD)

Outdoor Wireless Access Point Series Datasheet

Ruijie RG-AP630(CD) is 802.11ac wireless access points for outdoor wireless network applications.

The RG-AP630(CD) supports 1.167Gbps access rate, and take full care of security, RF control, mobile access, QoS, seamless roaming and other Wi-Fi aspects. Teaming up with Ruijie RG-WS Wireless Controller Series, the AP offer Wi-Fi user data forwarding, advanced security and access control with ease.

The industrial-class AP enclosure (IP67 rated) can withstand extreme outdoor conditions and hence simplify device installation and maintenance. RG-AP630 (CD) equipped with built-in directional antenna, can achieve the outdoor Wi-Fi coverage under extreme outdoor conditions in vast majority of the scenarios.

The RG-AP630(CD) Outdoor AP offers unparalleled productivity in a wide variety of outdoor networking solutions.

HIGHLIGHTS

- 802.11ac Superior Wireless Performance
- Built-in Directional Antenna & Lightning Arrester
- Outstanding Environmental Adaptability (IP67, -40-55°C)



RG-AP630(CD)

PRODUCT FEATURES

High Performance & Reliability

802.11ac Superior Wireless Performance

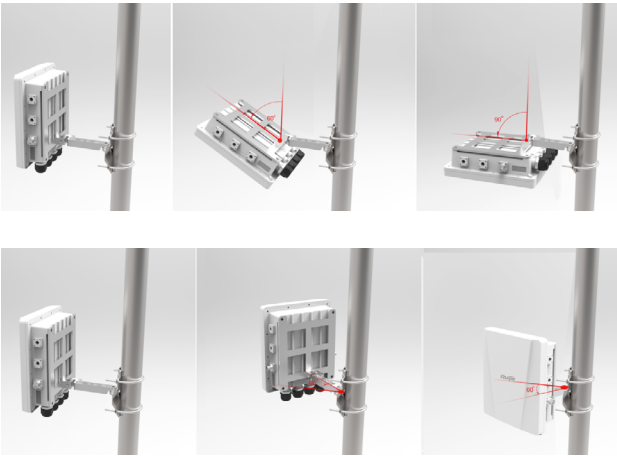
The RG-AP630(CD) supports 802.11n@2.4GHz and 802.11ac@5GHz, offering access rates up to 1.167Gbps. The outstanding wireless performance greatly optimizes wireless user experience, increases the number of concurrent users and enhances signal coverage.

Industry's Most Flexible Gigabit Uplink

The RG-AP630(CD) Series offers a 10/100/1000Base-T Ethernet uplink port that rids the LAN port of being the wireless access bottleneck, and a 1000M SFP combo port that adapts to wired networking structure under different user scenarios. The SFP Base-X port takes up the data transmission workload for optimal network deployment.

Easy-to-use Mount-Kit

An adjustable mount-kit is available by default for painless deployment optimization. The APs can be easily adjusted -60° to 60° horizontally and -60° to 90° vertically to adapt to various scenarios.



Adjustable Mount-kit of AP630

All-in-one Package for Painless Deployment

The RG-AP630(CD) Outdoor AP offers you a one-stop installation package. Everything you need is included, from external antennas to lightning arresters and coaxial cables, for effortless outdoor deployment.



Flexible WDS Mode

The APs implement WDS (Wireless Distribution System) to support interconnection of multiple APs or wireless bridging under 5 hops. Wireless bridging can be achieved even for a long distance. The outdoor APs also support point-to-multipoint bridging (CPE application scenarios) for more flexible networking. The features get over the outdoor deployment problems to support large-scale and remote high-speed wireless coverage.

Intelligent Device Recognition

The APs support intelligent recognition of end devices running mainstream operating systems such as iOS and Android.

Industry-leading Local Forwarding Technology

Employing an industry-leading local forwarding technology, the APs eliminate the traffic bottleneck of wireless access controllers.

Deploying with the Ruijie RG-WS Wireless Controller Series, users can flexibly pre-configure the data-forwarding mode of the outdoor APs. The APs also control if the data will be forwarded via the wireless controller. The local forwarding technology can forward large-scale, delay-sensitive, and real-time transmission data to greatly alleviate the traffic pressure on the wireless LAN controllers and fulfill the high traffic transmission requirements of the 802.11ac network.

Seamless Roaming Experience

The APs team up with the RG-WS Wireless Controllers in perfect harmony, allowing wireless users to roam seamlessly on Layer 2 and Layer 3 networks without data interruption.

Abundant QoS Policies

The AP supports a wide range of QoS policies. For example, it provides WLAN/AP/STA-based bandwidth limitation modes that prioritize key services over others.

Outstanding Environmental Adaptability

The outdoor APs offer an IP67-rated enclosure that fulfills waterproof, dustproof, moisture-proof and flame retardant requirements to withstand harsh environments such as wind erosion, rain and high humidity. The features greatly lengthen the equipment life span and effectively reduce the maintenance cost.

Wide Operating Temperature Range

All the AP components and enclosures can withstand a wide temperature range from -40°C to 65°C without any influence on the stability and life span. The design ensures the metal components cool down efficiently at high temperatures. The built-in heater module guarantees stable operation under freezing conditions.

Comprehensive Security Policies

User Data Encryption

The outdoor APs offer protected Wi-Fi access with the support of cutting-edge encryption technologies such as WEP, TKIP and AES, guaranteeing the data transmission security of the wireless network.

Virtual AP Technology

With the virtual AP technology, the AP can offer up to 14 ESSIDs (per radio) and 14 802.1Q VLANs. The network administrator can separately encrypt and isolate subnets or VLANs that have the same SSID. A separate authentication mode and encryption mechanism for each SSID can also be configured flexibly.

Standard CAPWAP Encryption

CAPWAP (Control and Provisioning of Wireless Access Points) enables communication between RG-WS Wireless Controllers and the outdoor APs. The standard ensures secure data transmission.

RF Security

In collaboration with Ruijie's RG-SNC Smart Network Commander and RG-WS Wireless Controllers, the APs enable the RF probe scanning mechanism to detect unauthorized access points or other RF interference sources. Once detected, the APs will alert network administrator to monitor potential threats and usage status in the wireless environment.

User Access Control

The APs support a wide range of authentication methods such as Web, 802.1x, MAC address and local authentication. The APs also support Ruijie's advanced Security Management Platform (SMP) BYOD Solution which complies with a standard access control system. The system has a set of control policies in terms of user access, authorization, host compliance check, network behavior monitoring, network attack defense, etc. All these control features ensure that users are authenticated before accessing the network services securely.

Wireless Protection

Together with Ruijie's RG-SNC Smart Network Commander and RG-WS Wireless Controllers, the APs provide a powerful range of wireless security features such as Wireless Intrusion Detection System (WIDS), RF Interference Location, Rogue AP Countermeasures, Anti-ARP Spoofing and DHCP protection for a truly secure and reliable wireless network.

Wireless IPv6 Access

Comprehensive IPv6 features are available to enable IPv6 forwarding on a wireless network. Both IPv4 and IPv6 users can connect to the ACs over tunnels, enabling IPv6 applications to be borne on the wireless network.

Flexible Authentication Modes

The APs support convenient Protected Extensible Authentication Protocol (PEAP), SMS Authentication, and QR Code Authentication.

The PEAP Authentication allows users to perform password authentication for once only. That means users are only required to enter credentials during their first network visit.

If the SMS authentication is adopted, users first sign in with their mobile phone numbers and then receive an SMS with login username and password for network access.

Flexible Device Management Mode

Flexible Switching Between the FAT & FIT Modes

The APs support flexible switching over the FAT and FIT modes according to the networking requirements of different industries. When there are few APs, users can adopt the FAT mode for easy independent network establishment. For large-scale networks, the APs can operate in FIT mode which allows centralized management of all the APs and other aspects such as security, traffic management, QoS and IP management when deployed with the RG-WS Wireless Controllers. Smooth transition from one to another, the APs fully protect user investment.

Simple Deployment With Zero Configuration

Under the FIT mode, no AP configuration is required before deployment. Also, no manual configuration is necessary for on-site installation, maintenance or replacement. Auto-configuration can be completed via the AC. This user-friendly feature can greatly reduce workload and investment costs.

Comprehensive Remote Management

The RG-WS Wireless Controllers or Cloud AC can remotely and centrally manage all AP operations such as channel, power ranking, SSID configuration, security configuration, VLAN division and so on. The feature enhances security and simplifies the wireless network management.

PoE Port For Easy Deployment & Maintenance

The RG-AP630(CD) supports the 802.3af PoE standard. By connecting to a HPoE switch through the AP Ethernet port, the outdoor APs can gain power and support data transmission via cables. The network administrator can remotely perform configuration. It also solves the problem of unstable power source, simplifies the installation process and maximizes the cost savings.

TECHNICAL SPECIFICATIONS

Outdoor AP

Model		RG-AP630(CD)
Target Deployments		For big campus, wireless city, harbor, storage room, mine
Basic Specifications	Radio	Concurrent dual-radio dual-band
	Protocol	802.11a/b/g/n/ac
	Operating Bands	802.11b/g/n: 2.4GHz to 2.483GHz 802.11a/n/ac: 5.150GHz to 5.350GHz, 5.47GHz to 5.725GHz, 5.725GHz to 5.850GHz (vary depending on countries)
	Antenna	Built-in directional antenna
	Antenna Gain	10dBi
	Max Throughput	300Mbps@2.4G 867Mbps@5G 1.167Gbps per AP
	Spatial Streams	2
	Modulation	OFDM: BPSK@6/9Mbps QPSK@12/18Mbps 16-QAM@24Mbps 64-QAM@48/54Mbps DSSS: DBPSK@1Mbps DQPSK@2Mbps CCK@5.5/11Mbps MIMO-OFDM: BPSK, QPSK, 16QAM, 64QAM and 256QAM
	Receiver Sensitivity	11b: -99dBm(1Mbps), -93dBm(5.5Mbps), -90dBm(11Mbps) 11a/g:-93dBm(6Mbps), -85dBm(24Mbps), -82dBm(36Mbps), -77dBm(54Mbps) 11n:-92dBm@MCS0, -73dBm@MCS7, -92dBm@MCS8, -73dBm@MCS15 11ac HT20: -90dBm (MCS0) , -63dBm (MCS9) 11ac HT40: -85dBm(MCS0) , -60dBm (MCS9) 11ac HT80: -82dBm(MCS0) , -58dBm (MCS9)
	Maximum Transmit Power	27dBm Note: The transmit power is configurable to up to 15dBm in 1dBm steps. The actual transmit power depends on local laws and regulations.
	Adjustable Power	1dBm
	IP Rating	IP67
Ports	Service Port	1 10/100/1000Mbps ETH1/PoE IN port (RJ45 connector), 1 SFP port (combo with EHT1)
	Management Port	1 console port
Power	Power Supply	PoE (802.3af) Compatible with PoE+
	Power Consumption	<12.95W
WLAN	Maximum clients per AP	Up to 512
	SSID capacity	Up to 14 per radio Up to 28 per AP
	SSID hiding	Support
	Configuring the authentication mode, encryption mechanism, and VLAN attributes for each SSID	Support
	Remote Intelligent Perception Technology (RIPT)	Support
	X-speed	Support

Model		RG-AP630(CD)
WLAN	Intelligent load balancing based on the number of users or traffic	Support
	STA control	SSID/radio-based
	Bandwidth control	STA/SSID/AP-based speed control
	Preference for 5 GHz (band select)	Support
	Wireless position tracking	Support
	Dynamic Frequency Selection (DFS)	Future Release Support
Security	PSK, Web, and 802.1x authentication	Support
	Data encryption	WPA (TKIP) , WPA2 (AES), WPA-PSK, and WEP (64 or 128 bits)
	QR code authentication	Support
	SMS authentication	Support
	PEAP authentication	Support
	Data frame filtering	Whitelist, static/dynamic blacklist
	User isolation	Support
	Rogue AP detection and countermeasure	Support
	Dynamic ACL assignment	Support
	WAPI	Support
	RADIUS	Support
	CPU Protection Policy (CPP)	Support
	Network Foundation Protection Policy (NFPP)	Support
	Wireless Intrusion Detection System (WIDS)	Support
Wireless Intrusion Prevention System (WIPS)	Support	
Routing	IPv4 address	Static IP address or DHCP reservation
	IPv6 CAPWAP tunnel	Support
	ICMPv6	Support
	IPv6 address	Manual or automatic configuration
	Multicast	Multicast to unicast conversion
Management and Maintenance	Network management	SNMP v1/v2C/v3, Telnet, SSH, TFTP, and FTP and web management
	Visualized wireless heat map analysis	Support (needs to integrated with SNC)
	Real-time spectrum analysis	Support (needs to integrated with SNC)
	Fault detection and alarm	Support
	Cloud AC management	Support
	Statistics and logs	Support
	FAT/FIT switching	The AP working in FIT mode can switch to the FAT mode through the RG-WS wireless AC. The AP working in FAT mode can switch to the FIT mode through a local console port or Telnet.

Model		RG-AP630(CD)
External Characteristics	Lock	Support
	LED Indicators	Power status and WDS signal strength
Relevant Standard	Wi-Fi Alliance Certification	Support
	Safety Standard	GB4943, UL/CSA 60950-1, EN/IEC 60950-1, EN/IEC 60950-22
	EMC Standard	GB9254-2008, EN301 489, EN55022, FCC Part15
	Health Standard	FCC Bulletin OET-65C ,EN 50385, IC Safety Code 6
	Radio Standard	FCC Part15, EN300328, EN301893
	Vibration Standard	GB/T 2423
Specifications	Dimensions (W x D x H) (mm)	276 × 246 × 90
	Weight	<2.5kg
Work Environment	Temperature	Operating Temperature: -40°C to 55°C
		Storage Temperature: -40°C to 70°C
	Humidity	Operating Humidity: 5% to 95% (non-condensing)
		Storage Humidity: 5% to 95% (non-condensing)
Installation Mode	Wall/pole-mount installation	

ORDERING INFORMATION

Model	Description
RG-AP630(CD)	Outdoor Wireless Access Point, IP67 rating, built-in directional antenna and lightning arrester, 2×2 MIMO, 2 spatial streams, support concurrent 802.11a/b/g/n/ac, FAT/FIT mode, PoE (Installation Mount-Kit included, but PoE adaptor sold separately)

