




Overview

The AP-60G3 is a specially designed industrial-grade Access Point, capable of providing multi-gigabit Wi-Fi transmission at the 60GHz spectrum. It is developed based on the IEEE 802.11ad wireless networking standards, which allows for more bandwidth usage for data transmission at high data rates.

The AP-60G3 delivers at a high data rate of 2.5Gbps, with throughput of up to 1.3Gbps at 500m. Enclosed in an IP67-rated casing, it is most suited for outdoor environment applications, while providing a stable and optimal wireless communication.

Product Features

 Less Crowded, Unlicensed Band

The use of the unlicensed 60GHz band avoids the already crowded frequency usage of the 2.4GHz and 5GHz band. As it is less crowded in the 60GHz band, incidents of interference are very low, thus making it easy to deploy a stable wireless transmission.

 High Throughput


Operating in the 60GHz band enables more accommodation of frequencies in the spectrum. This allows for data transmission with higher throughput in the Gigabit range. The AP-60G3 provides maximum throughput in the following scenario:

- Up to 1.8Gbps at 150m
- Up to 1.5Gbps at 300m
- Up to 1.3Gbps at 500m

Applications

The AP-60G3 is designed for a wide range of applications which includes the following:

- Gigabit Wireless Backhaul (Similar To Wireless Air Fibre)
- Fixed Broadband Communication
- Point-To-Multipoint Wireless
- Wireless CCTV Surveillance
- Industrial Wireless Applications

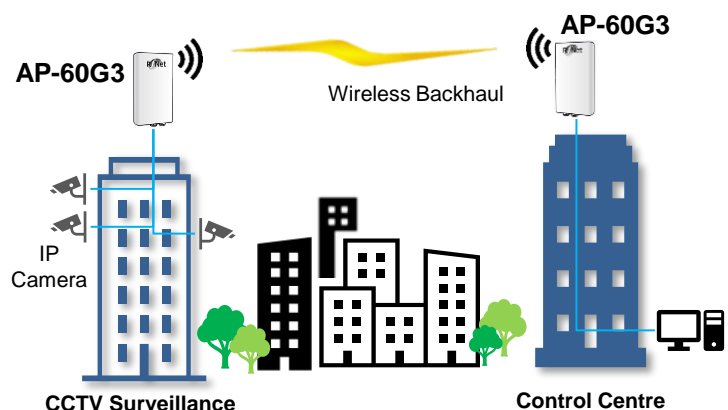
 Beamforming Technology

The wireless transmission performance has been greatly enhanced through phased-array radio and beamforming algorithm which improves the gain and directionality. This results in a faster, more direct and reliable wireless connection.

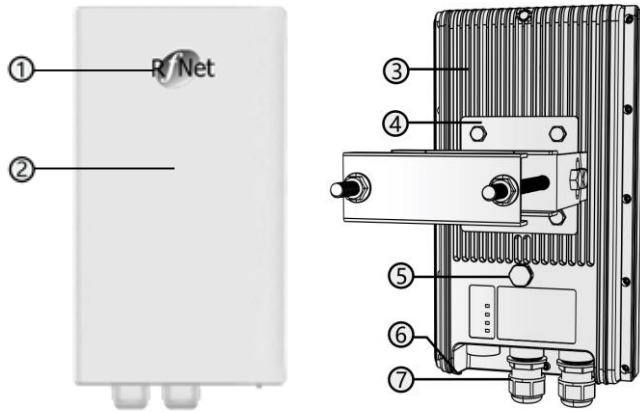
 IP67 Industrial-Grade Design; Weather Resistant

The AP-60G3 is housed in an industrial-grade casing that is strong and light. It has an IP rating of 67, making it Dust-Tight (no ingress of dust) and is protected in water of up to 1m.

The AP-60G3 also encompasses port lightning protection, making it ideal to deploy in harsh climate conditions, typical of outdoor environment.



Product Overview



Product Overview	
① Logo	⑤ Air Release Valve
② A-Side Casing	⑥ Grounding Terminal
③ B-Side Casing	⑦ Waterproof Connector
④ Mounting Kit	

Wireless	
Wireless LAN Standards	IEEE 802.11 ad
Throughput*	<ul style="list-style-type: none"> Up to 1.8 Gbps at 150m Up to 1.5 Gbps at 300m Up to 1.3 Gbps at 500m
Operating Frequencies	IEEE 802.11ad: 60GHz Unlicensed
Channel Bandwidth	Multiple 2.16 GHz Channels: Channel 1: 58.32 GHz Channel 2: 60.48 GHz Channel 3: 62.64 GHz Channel 4: 64.80 GHz
Modulation & Coding Scheme (MCS)	MCS 1-9 (Supports up to MCS 12 in the latest firmware update)
Transmission Range	Up to 500m
Antenna Gain @Channel 2	27 dBi
3 dB Beamwidth	12° (azimuth) 12° (elevation)
Over-The-Air RF Performance(TX) Peak EIRP @Channel-2	Up to 38 dBm
Over-The-Air RF Performance (RX) (+/- 2dBm)	<ul style="list-style-type: none"> 68 dBm @ MCS1 63 dBm @ MCS5 59 dBm @ MCS9
Operation Mode	Base / Terminal

Standard Package

- One AP-60G3 Access Point Module
- Quick Installation Guide
- Pole Mounting Bracket Kit
- POE Injector(1 pcs)
- Safety Chain (1 pcs)

Interface	
Power IN	<ul style="list-style-type: none"> 48 V/0.5A Passive Gigabit PoE IEEE802.3af PoE DC Input (12V/3A)
Power consumption	15 Watts maximum
Interface	<ul style="list-style-type: none"> 1x 2.5 GbE LAN Port (PoE In) 1x Grounding Terminal 1x Reset
LED	<ul style="list-style-type: none"> 60G (Signal Strength Indicator) ETH (Ethernet Connectivity) SYS (System Power)

Environmental	
IP Rating	IP67
Protection	<ul style="list-style-type: none"> 15 KV ESD Protection 6KV Lightning Protection
Operating Temperature	-30°C to +60°C
Storage Temperature	-40°C to +70°C
Operating Humidity	10% ~ 90% max non-condensing
Storage Humidity	5% ~ 95% max non-condensing

Management Function	
Management	<ul style="list-style-type: none"> Web Management and TR-069 Firmware Update By Web UI System Log
Security	<ul style="list-style-type: none"> 60GHz: WPA2-PSK encryption, Static IP Settings, Basic WLAN Settings
Network	<ul style="list-style-type: none"> VPN Client Static IP Settings Basic WLAN Settings
System Tools and Monitoring	<ul style="list-style-type: none"> Indicators: CPU, Memory Monitoring: Throughput, Interfaces
Other System Optimizations	<ul style="list-style-type: none"> Jumbo Packet Support (Up to 7,900 bytes) Hardware Watchdog Dual Flash Image Support

General	
Dimension LxWxH	288 x 150 x 68 mm
Weight	1.8 Kg (With Mounting Kit) 1.2 Kg (Without Mounting Kit)
Enclosure	Material: Outdoor ASA Stabilized Plastic
Mounting	Wall and Pole Mounting

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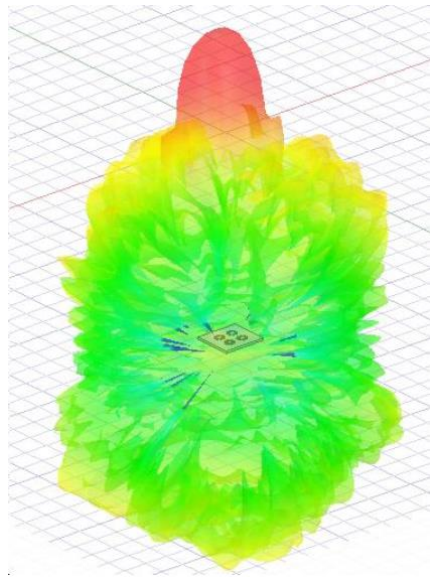


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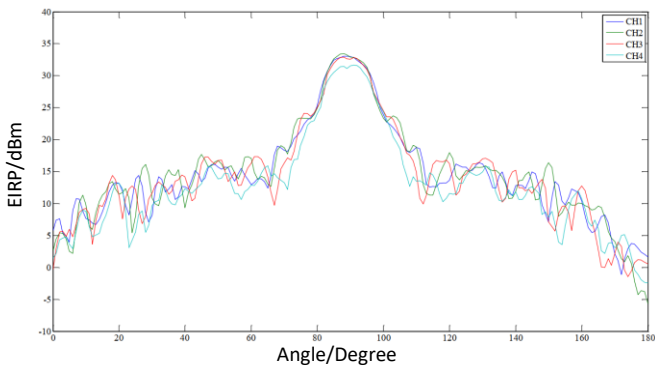
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Antenna Performance Parameter	
Antenna Type: Patch / Directional	
Horizontal Polarization	
3dB Beamwidth In E-Plane (Beam Steering)	12°
3dB Beamwidth In H-Plane (Beam Steering)	12°
Impedance Bandwidth	57GHz to 68GHz
Vertical Polarization	
3dB Beamwidth In E-Plane (Beam Steering)	12°
3dB Beamwidth In H-Plane (Beam Steering)	12°
Impedance Bandwidth	57GHz to 68GHz

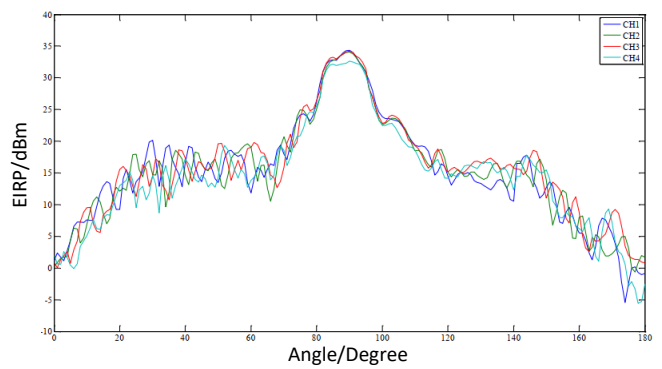
3D Radiation Pattern



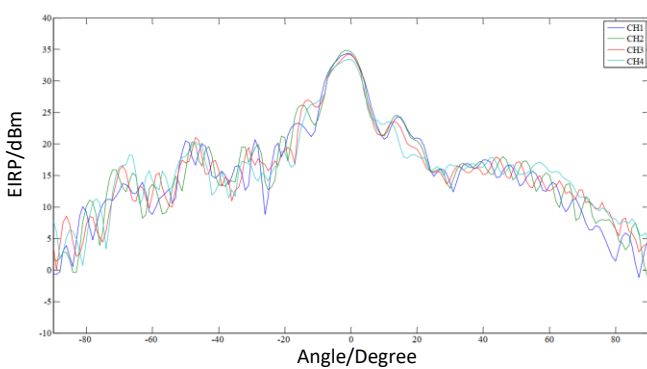
V Polarization H Plane



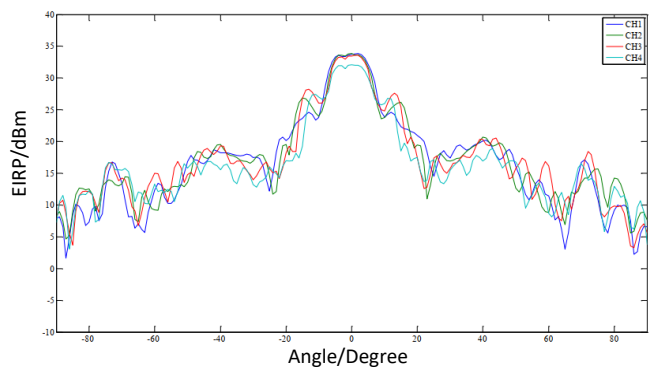
H Polarization V Plane



V Polarization V Plane



H Polarization H Plane



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