Z500 Dual-band 802.11ac AP

Z500 is an industrial-grade dual-band 2x2 MIMO 802.11ac wireless access point (AP), designed for high user density deployments and backhaul application.

With an integrated high-gain sector antenna, the Z500 is specially optimized for Wi-Fi deployments. It is ideal for industrial connectivity applications such as last mile or point-to-point long distance wireless backhaul using an external 5GHz antenna. In addition to efficient network management, access policy implementation is made easy by the flexibility of employing multiple SSIDs to control user access to the network.

High throughput access and PTP connection
• Aggregate 1,167 Mbps data rate   • IP67 weatherproof, 6kV surge protection

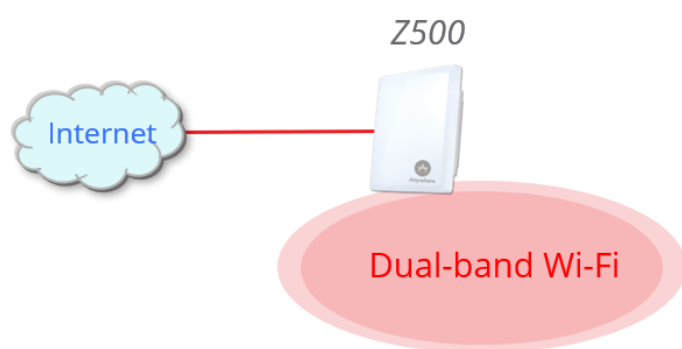| 802.11ac |
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| • Dual-band dual-concurrent MIMO
 • Built-in 2.4 and external 5 GHz antennas |

Deployment Architecture

PTP Connection

Z500   Z500

High Density AP

Z500

Internet

Dual-band Wi-Fi

Z500 Dual-band 802.11ac AP
Specifications

Wireless		
Operating Frequency[1]	2.400 – 2.4835 GHz 5.150 - 5.350 GHz 5.470 - 5.850 GHz Dual-band dual-concurrent	
Modulation	OFDM: BPSK, QPSK,16QAM, 64QAM, 256QAM DSSS: DBPSK, DQPSK, CCK	
No. of Spatial Stream	2×2: 2 MIMO	
Channel Bandwidth[1]	20/40/80 MHz Channel	
Receive Sensitivity	802.11b	-99 dBm (1 Mbps); -91 dBm (11Mbps)
	802.11g	-91 dBm (6 Mbps); -77 dBm (54Mbps)
	802.11n	-91 dBm (HT20); -88 dBm (HT40)
	802.11a	-93 dBm (6 Mbps); -77 dBm (54 Mbps)
	802.11a/n	-91 dBm (HT20); -88 dBm (HT40)
	802.11ac	-91 dBm (VHT20); -88 dBm (VHT40); -85 dBm (VHT80)
Transmit Power[1]	27 dBm (Max)	
No. of SSIDs supported	32 (Max.; 16 per Radio)	

Antenna		
Connected To	Radio 0	Radio 1
Type	Built-in 2.4 GHz	External 5 GHz
Gain	12 dBi	Optional Antennas: 5 GHz 19 dBi Panel for Backhaul; More Options on Request
Polarization	Vertical & Horizontal	
Horizontal Beamwidth	75˚	
Vertical Beamwidth	32˚	
VSWR	1.5 (Max.)	
Front-to-back Ratio	-23 dB (Min.)	
Isolation	24 dB (Min.)	

Network	
Redundancy	STP
Features	DHCP Client/Server, NAT, PPPoE Client, VLAN

Security	
Authentication	Open System, Shared Key, WPA/WPA-PSK, WPA2/WPA2-PSK, 802.1x(EAP-PEAP/TLS/TTLS/SIM/AKA), MAC address, RADIUS support, SSID suppression
Encryption Protocol	TKIP, 128-bit AES

Management	
User Interface	SmartMoment
Support	Remote Firmware Upgrade, SNMP v1/v2c[2], MIB support[2]

Hardware	
No. of Radio	1 × 2.4 GHz Radio + 1 × 5 GHz Radio
Network Interface	1 x GE & PoE Port
LED	RUN; LAN; RADIO 0; RADIO 1
Power Supply	802.3at PoE Injector
Power Consumption	25 W (Max.)
Antenna Movement	±30° Up/Down-tilt
MTBF	350,000 hours (50˚C)

Physical Characteristics	
Dimensions	270×270×80 mm (w/o Mounting)
Weight	1.86 kg (Net w/o Mounting); 2.39 kg (Net w/ Mounting); 2.66 kg (Gross)
Mounting	Pole Mounting (ø40 to ø52 mm)

Environmental	
Temperature	-40˚C to 65˚C (Operating)
Humidity	5% to 95 % Non-condensing
Elevations	86 to 106 kPa
Wind Loading	265 km/h (Max.)
Weatherproof	IP67, 6 kV Common Mode Surge Protection

Certification	
FCC, OFCA	

Standard Warranty	
First year free limited hardware warranty and firmware upgrade	

Ordering Information	
Part Number	GE.AP-Z500-00
Description	Z500 Dual-band 802.11ac AP

[1]operating frequency, transmit power and channel bandwidth vary by country/region settings
[2]available in the future updates

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