



X20 Dual 5GHz MeshRanger

Smart Virtual Fiber®



X20 is a high-performance dual 5 GHz radios wireless backhaul unit designed for flexible and expandable deployment regardless of physical constraints. Working as Smart Virtual Fiber, the X20 extends connectivity to the locations where extensive fiber optic cabling is unfeasible due to a tight timescale.

The Smart Virtual Fiber technology breaks the traditional hopping limitation of wireless networks by tackling the multi-hop bandwidth degradation. With Smart Virtual Fiber, the X20 MeshRanger supports over 10 hops and up to 600 Mbps world's leading end-to-end ring topology backhauling speed.

- High throughput wireless surveillance backhauling applications

- Up to 600 Mbps throughput

- IP 67 weatherproof

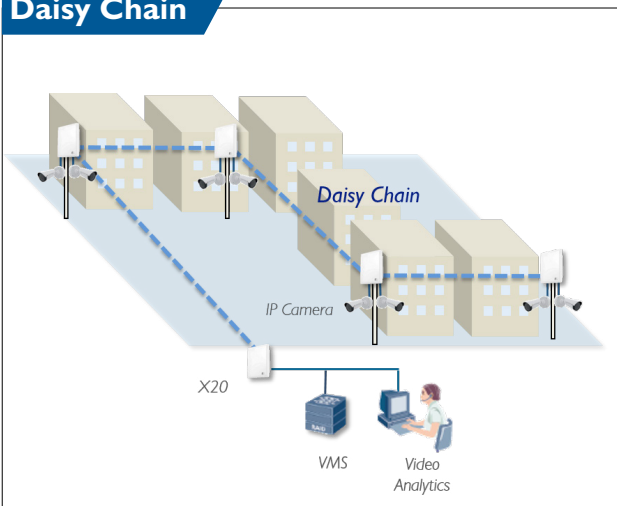
- Greater than 10 hops backhauling

- 20/40/80 MHz channel

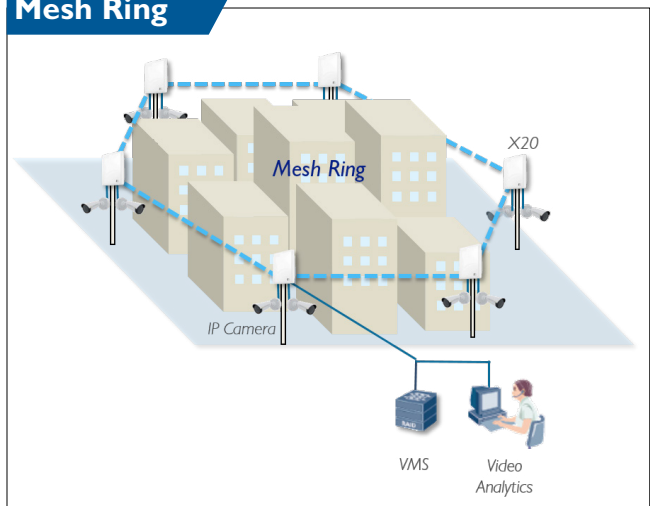
- 2 × 5 GHz radio

Deployment Architecture

Daisy Chain



Mesh Ring



X20 Dual 5GHz MeshRanger

Specifications

Wireless

Operating Frequency (Country-dependent)	5.150 - 5.350 GHz 5.470 - 5.850 GHz
Modulation Techniques	OFDM: BPSK, QPSK, 16QAM, 64QAM, 256QAM DSSS: DBPSK, DQPSK, CCK
No. of Spatial Stream	2×2: 2 MIMO, 20/40/80 MHz Channel
Receive Sensitivity	-91 dBm (20 MHz); -88 dBm (40 MHz); -85 dBm (80 MHz)
Transmit Power (Country-dependent)	27 dBm (Max.)

Antenna

Connected to	Radio 0	Radio 1
Type	Built-in 5 GHz	External 5 GHz
Gain	19 dBi	Optional Antennas: 5 GHz 19 dBi Panel; More Options on Request
Polarization	Vertical & Horizontal	
Horizontal Beamwidth	17°	
Vertical Beamwidth	17°	
VSWR	1.8 (Max.)	
Front-to-back Ratio	-25 dB (Min.)	
Isolation	35 dB (Min.)	

Networking

Smart Virtual Fiber Technology	Designed for Multi-hop High Throughput Wireless Surveillance and Backhauling
Topology	Daisy Chain, Mesh Ring
Redundancy	STP
Features	End-to-End Layer 2 Transparent, VLAN Trunking

Security

Mesh Link	2-tier Irreversible Key Generation Algorithm, Enhanced 3-factor (Mesh ID, Mesh Key and Static Key) Authentication Mechanism, MAC-based Access Control, Unique Per-link Packet Encryption
Authentication	Open System, Shared Key, WPA/WPA-PSK, WPA2/WPA2-PSK, 802.1x(EAP-PEAP/TLS/TTLS/SIM/AKA), MAC address
Encryption Protocol	TKIP, 128-bit AES

Management

Built-in Web User Interface	SmartMoment
Support	Remote Firmware Upgrade, SNMP v1/v2c, MIB support

Hardware

No. of Radio	2 × 5 GHz Radio
Network Interface	1 × GE & PoE Port
LED	RUN; LAN; RADIO 0; RADIO 1
Power Supply	802.3at PoE Injector
Power Consumption	25 W (Max.)
Antenna Movement	0° to 30° Down-tilt (or 0° to 30° Up-tilt by Reversed Mounting)
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, CE, RCM, OFCA

Warranty

First year free limited hardware warranty and firmware upgrade

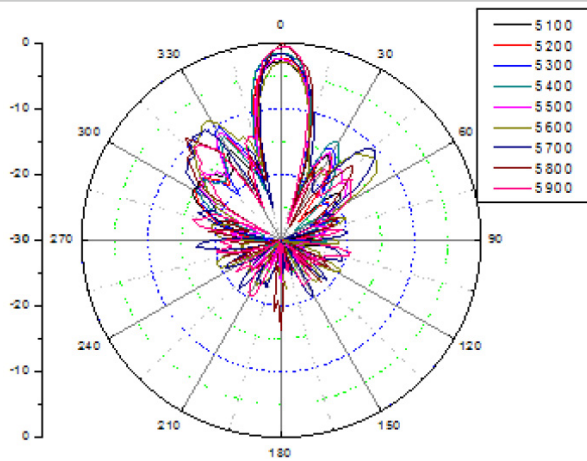
Ordering Information

Part Number	Description
GE.AP-X200-00	X20 Dual 5GHz MeshRanger

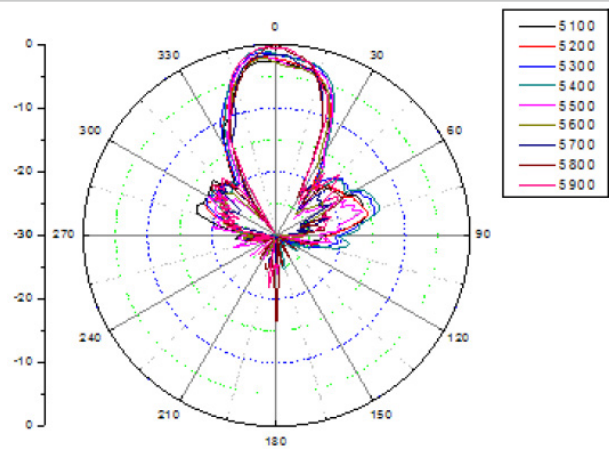
Antenna Patterns for Built-in 5GHz 19dBi 2x2 Panel Antenna

Vertical Polarization

E-plane

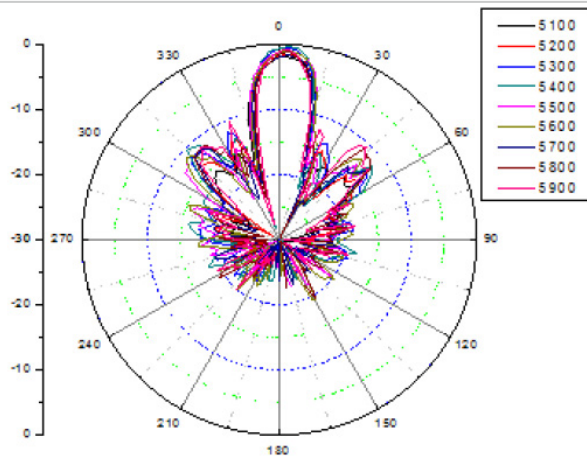


H-plane

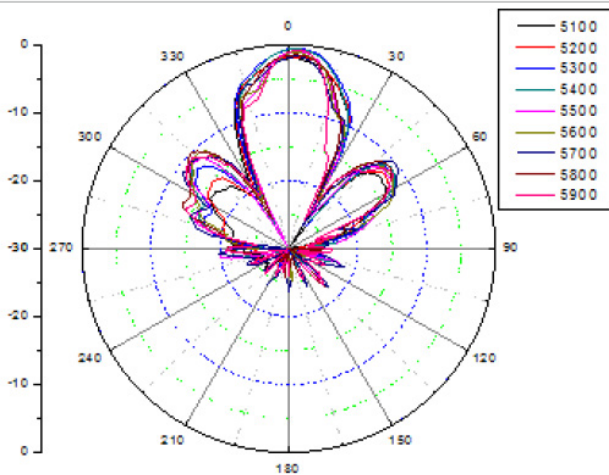


Horizontal Polarization

E-plane



H-plane



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