

AltoPlex C420 Starter Kit

60GHz Outdoor Wireless Gigabit Access Starter Kit

The C420 Starter Kit is a pair of 60GHz radios, a D621 and a C420, with integrated 128-element beamforming antennas that deliver best-in-class performance and resilience in a compact form factor. It ships pre-configured as a point-to-point link, and the D621 supports point-to-multipoint so you can add AltoPlex clients later.

Both radios are carrier-grade, manufactured in the USA and feature IP67 weather-sealing for reliable outdoor operation. Pre-configured radios, auto-aligning antennas, and included PoE injectors make deployment fast and simple.



High Capacity

Up to 3.8 Gbps aggregate with D621 (2Gbps on C420)

Low Latency

Sub 1ms latency

Adaptive Beamforming

128-element, phased array, beamforming antennas with 90° azimuth and 40° elevation scanning for maximum link resiliency and ranges up to 1312ft (400m)

Multi-Gig Ethernet and PoE Connectivity

- 2.5 GbE port on the D621
- 1 GbE port on the C420

Wi-Fi Management and GPS Location

Connect locally using the Wi-Fi network interface to manage the radios directly. Easily locate the radios using the integrated GPS receivers.

Dense Network Ready

60GHz spectrum with beamforming and TDMA for extremely reliable dense networks

Security

AES 128 encryption with automatic secure key distribution

Carrier-Grade

IP67 rated enclosure and built in USA for reliable, long-term operation in the field

Simple and Rapid Installation

AltoPlex's antennas auto-align for easy installs. Our Open API and native Layer 2 architecture enable easy integration into operators' existing networks

Specifications

SYSTEM

Configuration	D621: Point-to-Point (PtP) and Point-to-Multipoint (PtMP) Distribution or Client C420: PtP or PtMP Client
Frequencies	57 - 66GHz
Channel Bandwidths	4 non-overlapping 2.16GHz channels
Channel Access	TDMA/TDD
Modulation and Coding Schemes	12 levels, adaptive—MCS-0 (BPSK) to MCS-12 (16QAM)
Antenna	Integrated 128-element beamforming antenna with wide scanning range: 90° azimuth, 40° elevation
Maximum EIRP	40dBm
Range	Up to 400m
Capacity	D621: up to 3.8Gbps aggregate C420: up to 2Gbps aggregate
Ethernet Frame Type	Transparent bridging of all Ethernet types including VLAN and VLAN stacking
Latency	< 1ms
L2 switching	Complete Layer 2 switching, including VLAN support
Security	AES 128
Wi-Fi Management Interface	2.4GHz IEEE 802.11b/g/n wireless management interface (not a data access point)
Location	Integrated GPS receiver to identify and locate individual radios

CONNECTIVITY

Ethernet	D621: 1 x 2.5GbE RJ45 C420: 1 x 1GbE RJ45
Voltage	56VDC
PoE Input	D621: 802.3at C420: 802.3af
Power Consumption	D621: 15W maximum C420: 11W maximum

MANAGEMENT

Management	Web GUI, CLI, REST API and AltoCommand (optional)
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MECHANICAL

Dimensions (H x W x D)	D621: 5.9" x 3.8" x 1.4" (150 x 95 x 35mm) C420: 5.9" x 3.8" x 1.4" (150 x 95 x 35mm)
Weight	D621: 14oz (400g) C420: 14oz (400g)
Operating Temperature	-40° to +131°F (-40° to +55°C) -22°F (-30°C) cold start
Casing	Die-cast powder-coated aluminum chassis with PC-ABS radome
Ingress Protection	IP67
Regulatory	FCC, IC, CE (pending)
ESD	IEC EN 61000-4-2
EMC	IEC EN 61000-4-3
Radio	ETSI EN 303 722, EN 300 328, EN 303 413
Mounting	Integrated wall and pole mount supporting .5" band clamps. Additional mounting accessories supporting elevation adjustment are available.

MODEL NUMBER

AW3-C423-KIT-PW	C420 Starter Kit – C420 and D621 60GHz Radios with PoE Injectors
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INCLUDED ACCESSORIES

AX-P-IN-AF-1G-US	Indoor 802.3af (15W) 1GbE PoE injector with 0.8m US power cord
AX-P-IN-AT-5G-US	Indoor 802.3at (30W) 5GbE PoE injector with 0.8m US power cord

OPTIONAL ACCESSORIES

AX-AW3-MT-WALL	Wall standoff bracket that enables azimuth adjustment
AX-AW3-EXT-MOUNT	Extended range pole mounting kit for AltoPlex radios, enabling up to +60/-45° elevation adjustment