

AltoPlex Q423 Bridge Kit

60GHz Outdoor Wireless Gigabit Network Bridge

The Q423 Bridge Kit is a pair of P423 60GHz radios with integrated 128-element beamforming antennas that provide best-in-class link resiliency and full capacity range in a very compact form factor. It is pre-configured for point-to-point (PtP) connectivity. Each radio also features 3 built-in gigabit RJ-45 Ethernet ports, two of which support PoE output for additional devices. P423 radios are carrier-grade, manufactured in the USA and feature IP67 weather-sealing for reliable operation outdoors and in harsh environments.

The Q423 Bridge Kit includes everything needed to quickly install a multi-gigabit point-to-point link.



High Capacity

Up to 2Gbps aggregate.

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) MCS-9.

Gigabit Ethernet and PoE Connectivity

- 1 gigabit RJ-45 PoE input
- 2 gigabit RJ-45 PoE outputs for connecting cameras, Wi-Fi APs, collocated Altowav radios, and more.

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

Altowav's antennas auto-align for easy installs, and our Open API and native layer 2 architecture enable easy integration into operators' existing networks.

Specifications

SYSTEM

Configuration	Point-to-Point
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 1312ft (400m) MCS-9
Capacity	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 locate individual radios

CONNECTIVITY

Ethernet	3 x 1GbE RJ45
Voltage	56VDC
PoE Input	802.3bt, Type 4, 90W
PoE Output	2 x Active, 802.3bt, Type 3, 75W total with up to 60W Max for a single port
Power Consumption	12W maximum (not including PoE output)

MANAGEMENT

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

Dimensions (H x W x D)	6.88" x 6.88" x 1.62" (174.75 x 174.75 x 41.15mm)
Weight	1.59 lbs (720 grams)
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, ISED, 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-Q423-POW-BRI	Q423 Bridge Kit – 2 P423 3-Port 60GHz Network PtP Radios with PoE Injectors
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INCLUDED ACCESSORIES (2 EA.)

AX-P-IN-BT-5G-US	Indoor 802.3bt (90W) 5GbE PoE injector with 2.6ft (0.8m) US power cord
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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