AltoPlex
C410

60GHz Outdoor Wireless Standard Client Unit

The C410 is a 60GHz radio with integrated 64-element beamforming antenna that enables the quick and easy installation of reliable, gigabit connections, all in a cost-effective and compact form factor.

The C410 is carrier-grade, manufactured in the USA and features IP67 weather-sealing for reliable operation outdoors and in harsh environments. It is ideally suited as a client for residential and enterprise gigabit access applications.

High Capacity
Up to 2Gbps aggregate

Low Latency
Sub 1ms latency

Adaptive Beamforming
64-element, phased array, beamforming antenna with 90° azimuth and 40° elevation scanning for maximum link resiliency and ranges up to 820ft (250m) MCS-9

Gigabit Ethernet
Built-in gigabit RJ45 port

GPS Location
Easily locate the radio using the integrated GPS receiver.

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. Our Open API and native Layer 2 architecture enable easy integration into operators' existing networks

altowav™

Specifications

SYSTEM

Configuration	Point-to-Point and Point-to-Multipoint 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 64-element beamforming antenna with wide scanning range: 90˚ azimuth, 40˚ elevation
Maximum EIRP	37dBm
Range	Up to 820ft (250m) 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
Location	Integrated GPS receiver to locate individual radios

CONNECTIVITY

Ethernet	1 x 1GbE RJ45
Voltage	56VDC
PoE Input	802.3af
Power Consumption	10W maximum
Included PoE Injector	Indoor 802.3af (15W) 1GbE PoE injector with 2.6ft (0.8m) US power cord

MANAGEMENT

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

MECHANICAL

Dimensions (H x W x D)	5.9" x 3.8" x 1.4" (150 x 95 x 35mm)
Weight	14oz (400g)
Operating Temperature	-22° to +131°F (-30° to +55°C)
Casing	Die-cast powder-coated aluminum chassis with PC-ABS radome
Ingress Protection	IP67
Regulatory	FCC, IC, CE
ESD	IEC EN 61000-4-2
EMC	IEC EN 61000-4-3
Radio	ETSI EN 303722-V1.2.1, EN 300328-V2.2.2, EN 303413-V1.2.1
Mounting	Integrated wall and pole mount supporting .5" band clamps. Additional mounting accessories supporting elevation adjustment are available.

MODEL NUMBER

AW3-C410-C-PW	C410 60GHz Standard Range Client Radio

INCLUDED ACCESSORIES

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

DISTRIBUTION NODE/CLIENT MODEL NUMBERS

AW3-D621-C-W	D621 60GHz Network Distribution/High-Capacity Client Radio
AW3-D423-C-W	D423 3-Port 60GHz Network Distribution/Client Radio

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
AX-PSW-OD-4AT-4C25	Outdoor 4 port PoE 2.5GbE switch
AX-PSW-OD-MOUNT	Pole mount bracket for Outdoor PoE switch

altowav