

# C6x Lite Edition | Next-Gen Technology, Trusted Reliability

## Unlicensed 6 GHz Radio with Modular Antennas for PTP and PTMP

The C6x Lite Edition (LE) delivers next-generation performance in an affordable, cost-optimized package. Compatible with the modular N5-X twist-on antenna family (12, 16, 20, 25, and 30 dBi), the C6x LE adapts easily to a wide range of deployment scenarios. With throughput of up to 1.0 Gbps in Point-to-Point (PTP) mode and 750 Mbps in Point-to-Multipoint (PTMP) mode, it provides reliable connectivity at the same price point as the legacy C5x. A maximum 80 MHz channel width helps reduce interference and simplify planning, while seamless integration with existing networks ensures the C6x-LE is an ideal upgrade path for operators in cost-sensitive or emerging markets.





5.15 - 6.425 GHz



750 Mbps PTMP



IP67



1.0 Gbps PTP

#### INTEGRATED RADIO WITH MODULAR ANTENNAS

The C6x Lite Edition (LE) includes a native 8 dBi antenna and supports Mimosa's modular N5-X twist-on options (12–30 dBi). Its simple, flexible design adapts to varied deployments, delivering up to 1.0 Gbps PTP and 750 Mbps PTMP for affordable next-generation connectivity.



From left to right: N5-X16, N5-X12, N5-X25, N5-X20, N5-X30

#### INCREDIBLE SPEED AND PTMP SCALE

Previous OFDM technologies limited the scale of client deployments and the ability to deploy in dense, noisy areas. In PTMP client deployments, the C6x Lite Edition pairs together with new multi-user OFDMA scheduling and beamforming technologies on the A6 access point to enable subscriber scaling, advanced noise management, and access to the low-noise 6 GHz band.

#### NOISE JUST MET ITS MATCH

The C6x Lite Edition (LE) ensures reliable links starting with the high-isolation design of the N5-X antennas. Using OFDMA modulation, it minimizes in-band noise by dividing the channel into smaller 2 MHz resource units (RUs), improving performance compared to legacy OFDM systems where noise impacted the entire channel.

#### **CARRIER GRADE**

The C6x Lite Edition (LE) features a rugged IP67-rated design built for tough outdoor conditions. It supports Mimosa Cloud and MMP for simplified deployment, monitoring, and optimization. With RF noise-fighting technology and ongoing software updates, the C6x-LE delivers dependable, cost-effective connectivity for mod-ern networks.

# PERFORMANCE

Max Throughput:	PTP: 1.0 Gbps IP aggregate PTMP: 750 Mbps IP aggregate UL/DL (1200 Mbps PHY)
Wireless Protocols:	WiFi Interop; Auto-TDD PTMP TDMA
Modes:	PTP backhaul, PTMP client

## **RADIO**

MIMO & Modulation:	2x2, PTMP MU-MIMO, OFDMA (future release), BPSK-1024QAM
Bandwidth:	20/40/80 MHz channels, tunable to 5 MHz increments
Frequency Range:	5150–6425 MHz (restricted by country of operation)
Max Output Power:	27 dBm
Rx Sensitivity (MCS 0):	-90 dBm @ 80 MHz   -93 dBm @ 40 MHz   -96 dBm at 20 MHz

## **POWER**

Max Power Consumption:	20 W
System Power Method:	Passive PoE
PoE Power Supply:	Compliant, 24 V (PoE injector not included)

## **PHYSICAL**

Dimensions:	Height: 178mm (5")   Width: 113mm (4.5")   Depth: 67mm (2.6")
Weight:	0.7 kg (1.54 lbs)
RF Connector Type:	Mimosa N5-X twist-on
Enclosure Characteristics:	Die-cast aluminum, UV stabilized paint, with outdoor UV stable plastic radome lens
Mounting:	Dual-pole strap capable
Grounding:	Ground lug



#### **ENVIRONMENTAL**

Outdoor Ingress Protection Rating:	IP67
Operating Temperature:	-40° C to + 55° C
Operating Humidity:	5 to 100% Condensing
Operating Altitude:	4,420 m (14,500') maximum
Shock and Vibration:	ETS 300-019-2-4 calss 4M5

## **REGULATORY AND COMPLIANCE**

Approvals:	FCC Part 15.407; IC RSS210; CE (RED, EMCD, VLD, RoHS); ETSI 301 893/302 502
RoHS Compliance:	Yes
Safety:	EN 62638-1

## **FEATURES**

Gigabit Ethernet:	10/100/1000-BASE-T
Management Services:	MMP support; SNMPv2c/v3; Syslog; HTTPS; HTML 5 based Web GUI; IPv4 and IPv6
Smart Spectrum Management:	Active scan monitors/logs ongoing RF interference across all channels (no service impact); Dynamic auto-optimization of channel and bandwidth use
Security:	AES; RADIUS; 802.1x authorization (future release)
QoS:	WiFi Interop Mode WMM; SRS mode supports 4 user configurable QoS levels supporting both CBW-FQ and PQ (future release)
VLAN:	Q-in-Q (future release), double tagging, management VLAN, PTMP per client VLAN
Part Number:	100-00111-01
Compatible PoE:	502-00030 PoE Injector 24V 30W Sold Separately

Mimosa Networks, a wholly owned subsidiary of Radisys, is the global technology leader in wireless broadband solutions, enabling service providers to connect dense urban and hard-to-reach rural homes at a fraction of the cost of fiber. Mimosa Networks was acquired in 2023 by Radisys, the global leader in open telecom solutions. DS-2025-10-C6x-LE.

