

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





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 modern networks.

PERFORMANCE

Max Throughput:	PTP: 1.0 Gbps IP aggregate PTMP: 750 Mbps IP aggregate UL/DL (2402 Mbps PHY)
Wireless Protocols:	WiFi Interop; Auto-TDD (future release); 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 SEPARETLY

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-2025-09-C6x-LE.

