C5i Specifications

Performance

Max Throughput	500+ Mbps (866 Mbps PHY)
Low Latency	8 ms
Wireless Protocols	RTS/CTS, CSMA Mimosa Flexible TDMA
Modes	Client Mode Only

Radio

Radio Type	Outdoor: 802.11ac Indoor: 802.11n
MIMO & Modulation	Outdoor: Up to 4x4:4 MIMO OFDM up to 256 QAM Indoor: 1x1 with Rx diversity OFDM up to 64 QAM
Bandwidth	Outdoor: 20/40/80 MHz channels tunable in 5 MHz increments Indoor: 20/40 MHz channels tunable in 5 MHz increments
Frequency Range	Outdoor: 4900-6000 MHz restricted by country of operation (*new* US/FCC 5600-5650 support) Indoor: 2400-2483 MHz for indoor use
Max Output Power	Outdoor: 24 dBm Indoor: 18 dBm
Sensitivity (MCS 0)	Outdoor: -87 dBm @ 80 MHz/-90 dBm @ 40 MHz/-93 dBm @ 20 MHz Indoor: -90 dBm

Antenna

Gain	Outdoor: 11 dBi Indoor: 3 dBi
Beamwidth (3dB)	Outdoor: +/- 35°
Cross-Polar Isolation	Outdoor: 20 dB
Polarization	Outdoor:Circular Polarization

Power

Max Power Consumption	20 W
System Power Method	802.3at compliant
PoE Power Supply	Passive POE compliant, 48-56 V Power over Ethernet supply with IEC61000-4-5 surge protection

Physical

Dimensions	Width: 37.85 mm Diameter: 138.31 mm
Cable	5 m RJ-45 CAT-5e cable integrated directly into unit with internal strain relief, non-removable
Weight	0.275 Kg
Enclosure Characteristics	Outdoor UV stabilized engineered polymer
Mounting	Indoor only. Self-install, affixed to interior windows with adhesive tape.

Environmental

Operating Temperature	-20°C to +40°C (-4°F to 104°F)
Operating Humidity	5 to 100% condensing
Operating Altitude	4420 m (14500') maximum
Shock & Vibration	ETS 300-019-2-4 class 4M5

Features

Gigabit Ethernet	10/100/1000-BASE-T
Multi-User MIMO	CPE is MU-MIMO-capable
TDMA Mode	Optional TDMA protocol for increased network efficiency
Management Services	Mimosa cloud monitoring and management SNMPv2 & Syslog legacy monitoring HTTPS HTML 5 based Web UI
Smart Spectrum Management	Active scan monitors/logs ongoing RF interference across channels (no service impact) Dynamic auto-optimization of channel and bandwidth use
Security	WPA2 + Mimosa 802.1x Client
QoS	Supports 4 pre-configured QoS levels

Regulatory + Compliance

Approvals*	FCC Part 15.407 and Part 90Y, IC RSS210, CE, ETSI 301 893/302 502
RoHS Compliance	Yes
Safety	UL/EC/EN/ 60950-1 + CSA-22.2

*Anticipated by product shipment

C5i Antenna Beamforming and Plots

Averaged E-pol/H-pol Pattern

Beamforming Example

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