

RADWIN 2000i Series

Point-to-Point Indoor Radio - Data Sheet



RW-2050-R200

Product Description

RW-2050-R200 is a carrier-class All-Indoor radio supporting 4.9 to 5.8 GHz frequency range and complying with FCC/IC, FCC & IC regulations. The radio is part of the RADWIN 2000i series that delivers high capacity and extended range for carriers' backhaul needs.

RW-2050-R200 delivers up to 750 Mbps net aggregate throughput.

The radio is connectorized for external antenna (2 x N-type).

Product Highlights

- Up to 750 Mbps Ethernet net throughput
- Long range - Up to 120 km / 75 miles
- Configurable asymmetric throughput
- Advanced OFDM & MIMO technologies for operation in nLOS/NLOS and dense radio environments
- Supports intra-site and inter-site synchronization to maximize capacity
- Embedded GPS for Radio synchronization
- Dynamic bandwidth selection to maximize throughput in noisy environment

Product Specifications:

Configuration					
Architecture	Indoor Unit connectorized for external antenna (2 x N-type)				
Radio to Antenna Interface	Outdoor coax cable with N-Type connectors				
Radio					
Max Capacity	750 Mbps net aggregate throughput				
Range	Up to 120 km / 75 miles				
Channel Bandwidth	Configurable: 10, 20, 40, 80 MHz (for the default band)				
Modulation	2x2 MIMO-OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)				
Adaptive Modulation & Coding	Supported				
Automatic Channel Selection	Supported upon power up				
DFS	Supported (FCC/IC, IC)				
Diversity	Supported				
Spectrum Viewer	Supported				
Max Tx Power	25 dBm				
Duplex Technology	TDD				
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6				
Encryption	AES 128; FIPS 197				
Support Indoor units					
Uplink / Downlink Allocation	Configurable: Symmetric or Asymmetric				
QoS	Packet classification to 4 priority queues according to 802.1P or Diffserv				
VLAN Support	802.1Q, QinQ, 4094 VLANs				
TDD Intra Site Synchronization	Supported				
TDD Inter Site Synchronization	Supported through Embedded GPS receiver per site				
ETH Interface					
Ethernet ports	- 10/100/1000BaseT - One SFP port Auto-Negotiation (IEEE 802.3u); Framing/Coding IEEE 802.3				
Connector	RJ-45				
SFP Interface	1 x GbE Port				
Supported Bands					
Band	CBW 10MHz [GHz]	CBW 20MHz [GHz]	CBW 40MHz [GHz]	CBW 80MHz [GHz]	Radio Compliance
5.8 GHz FCC/IC (default)	5.730-5.845	5.730-5.845	5.730-5.845	5.730-5.845	FCC 47CFR Part 15.407; IC RSS-247
5.160-5.245 GHz FCC	5.160-5.245	5.160-5.245	5.155-5.250	5.155-5.250	FCC 47CFR Part 15.407
4.9 GHz FCC/IC	4.940-4.990	4.940-4.990	-	-	FCC 47CFR Part 90 Subpart Y; IC RSS-111
5.4 GHz FCC/IC	5.480-5.715	5.480-5.715	5.480-5.715	5.485-5.715	FCC 47CFR Part 15.407; IC RSS-247
5.2 GHz FCC/IC	5.255-5.345	5.255-5.345	5.255-5.345	5.250-5.350	FCC 47CFR Part 15.407; IC RSS-247
5.4 GHz IC	5.480-5.715	5.480-5.715	5.480-5.715	5.485-5.605	IC RSS-247
Mechanical					
ODU Dimensions	43.6(w) x 25.3(h) x 4.4(d) cm				
ODU Weight	2.3 kg / 5.07 lbs				
Power					
Power Feeding	+/-20 to +/-60VDC 2A				
Power Consumption	<30W				
Environmental					
Operating Temperatures	-5°C to 50°C / 23°F to 122°F				
Humidity	90% non-condensing				
Safety					
FCC/IC (cTUVus)	UL 60950-1, CAN/CSA C22.2 60950-1				
ETSI	EN/IEC 60950-1				
EMC					
FCC	CFR47 Class B, Part15, Subpart B				
ETSI	EN 300 386, EN 301 489-1, EN 301 489-4, EN 301 489-17				
CAN/CSA-CEI/IEC	CISPR 22-2010 Class B				
AS/NZS	CISPR 22-2009+A1:2010 Class B				

Ordering Info

Part Number: RW-2050-R200

Description: RADWIN 2000i ODU, connectorized for external antenna (2 x N-type), supporting multi frequency bands at 5.x GHz, factory default 5.8 GHz FCC/IC.