

RADWIN 2000

RW-2024-B150 ODU Unit - Data Sheet



B-Series

RW-2024-B150

RW-2024-B150 is a carrier-class radio supports 2.4 GHz and 2.3 GHz bands, complying with FCC, IC (Canada) and Universal regulations. This radio is part of the RADWIN 2000 B-Series that delivers high capacity and extended range for carriers' backhaul needs.

Packing native TDM and Ethernet over a single wireless link, the RADWIN 2000 B-Series provides 50 Mbps net aggregate throughput (up to 8 E1/T1plus Ethernet) at a range of up to 120 km/75 miles.

RADWIN RW-2024-B150 comes with an integrated antenna.

Product Highlights

- 50 Mbps Ethernet net throughput and up to 8E1s/T1s
- Native TDM transport
- GBE interface support
- Long range – up to 120 km/75 miles
- Single radio supporting multiple bands of 2.4 GHz and 2.3 GHz
- Adaptive asymmetric throughput – dynamic allocation between uplink and downlink
- Advanced MIMO, OFDM and Diversity technologies
- Robust and reliable to operate in tough conditions, extreme temperatures and non line-of-sight scenarios

Product Specifications

Configuration	
Architecture	Small Form Factor ODU Unit with Integrated Antenna
IDU to ODU Interface	Outdoor CAT-5e cable; Maximum cable length: 100m @100BaseT and 75m @1000BaseT
Radio	
Capacity	50 Mbps net aggregate throughput (up to 8E1s/T1s plus Ethernet)
Range	Up to 120 km / 75 miles
Channel Bandwidth	Configurable: 5,10, 20 and 40MHz
Modulation	2x2 MIMO-OFDM (BPSK/QPSK/16QAM/64QAM)
Adaptive Modulation & Coding	Supported
Automatic Channel Selection	Supported
Diversity	Supported
Spectrum View	Supported
Max Tx Power	25 dBm
Duplex Technology	TDD
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6
Encryption	AES 128
Supported Indoor Units	IDU-C Series (RW-72XX-2000), IDU-E Series (RW-71XX-1000) RADWIN PoE device (RW-9921-101X)
QoS	Packet classification to 4 queues according to 802.1p and Diffserv, Dynamic scheduling according to air interface changes
VLAN	Supported
Ethernet Ring Protection	Supported, including Ethernet 1+1
Hub Site Synchronization (HSS)	Up to 16 collocated links (RADWIN 5000, RADWIN 2000 and/or WinLink 1000)
Monitored Hot Standby (MHS)	1+1 with RADWIN 2000 link or WinLink 1000 link

Supported Bands					
Occupied Frequency Range					
Band	Channel BW 5MHz	Channel BW 10MHz	Channel BW 20MHz	Channel BW 40MHz	Radio Compliance
2.4 GHz FCC/IC*	2.4095-2.4645 GHz	2.407-2.467 GHz	2.402-2.472 GHz	2.392-2.482 GHz	FCC PART 15, part C and RSS 210
2.3 GHz Universal	2.3045-2.4745 GHz	2.302-2.477 GHz	2.297-2.482 GHz	2.287-2.492 GHz	

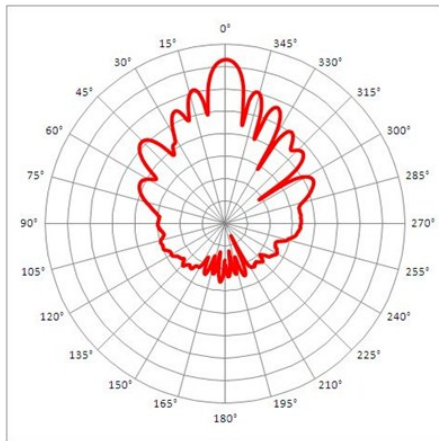
* Factory Default

Mechanical	
Dimensions	37.1(w) x 37.1(h) x 11.0(d) cm
Weight	3.5 kg / 7 lbs
Power	
Power Feeding	Power provided over ODU-IDU cable
Power Consumption	<35W (IDU + ODU)
Environmental	
Operating Temperatures	-35°C - 60°C / -31°F - 140°F
Humidity	100% condensing, IP67 (totally protected against dust and against immersion up to 1m)
Safety	
FCC/IC (cTUVus)	UL 60950-1, UL 60950-22, CAN/CSA C22.2 60950-1, CAN/CSA C22.2 60950-22
ETSI	EN/IEC 60950-1, EN/IEC 60950-22
EMC	
FCC	CFR47 Class B, Part15, Subpart B
ETSI	EN 300 386, EN 301 489-1, EN 301 489-4
CAN/CSA-CEI/IEC	CISPR 22-04 Class B
AS/NZS	CISPR 22-2004 Class B

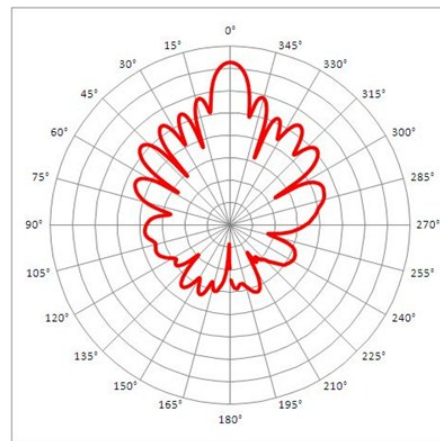
Integrated Antenna

Minimum Peak Gain	23 dBi \pm 1
VSWR	1.5 : 1 (typ), 1.7 : 1 (max)
3 dB Beamwidth AZ.	9° (typ)
3 dB Beamwidth EL.	9° (typ)
Polarization	Dual Linear (Vertical and Horizontal)
Sidelobes Level	ETSI EN 302 085 V1.1.2, TS1-TS3
Cross Polarization	ETSI EN 302 085 V1.1.2, TS1-TS3
F/B Ratio	35 dB (max)
Port To Port Isolation	40 dB (min)
Lightning Protection	DC grounded
Antenna Patterns	

Elevation @ 2.4GHz



Azimuth @ 2.4GHz



Ordering Information

Part Number: RW-2024-B150

Description: RADWIN 2000 C-Series ODU with integrated antenna, supporting multi frequency bands at 2.x GHz, factory default 2.4 GHz FCC/IC

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