

RADWIN B-Series

RW-2250-B350



RW-2250-B350

RW-2250-B350 is a carrier-class radio supporting the 5.3 GHz, 5.4 GHz and 5.8 GHz bands and complying with ETSI regulations (factory default: 5.4 GHz ETSI).

The multi-band radio is part of the RADWIN 2000 B-Series that delivers highest 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 8E1/T1plus Ethernet) at a range of up to 120 km/75 miles.

RADWIN RW-2250-B350 includes an embedded antenna and connectors for use with external antennas, offering a single Small Form Factor radio configuration.

Product Highlights

- 50 Mbps Ethernet net throughput and up to 8E1s/T1s
- Native TDM transport
- Single Small Form factor with embedded antenna and connectorized for external antenna
- Long range – up to 120 km/75 miles
- Adaptive asymmetric throughput – dynamic allocation between uplink and downlink
- Single radio supporting multiple bands (5.x GHz)
- Advanced MIMO, OFDM and Diversity technologies
- Robust and reliable to operate in tough conditions, extreme temperatures and non line-of-sight scenarios

RADWIN

Product Specifications

Configuration	
Architecture	Small Form Factor ODU Unit with embedded antenna and Connectorized for External Antenna
IDU to ODU Interface	Outdoor CAT-5e cable; Maximum cable length: 100 m
Radio	
Capacity	50 Mbps net aggregate throughput (up to 8E1s/T1s plus Ethernet)
Range	Up to 120 km / 75 miles
Channel Bandwidth	Configurable: 10 or 20 MHz
Modem Operations	Single chain 2X2 Diversity 2X2 MIMO
Modulation	2x2 MIMO-OFDM (BPSK/QPSK/16QAM/64QAM)
Adaptive Modulation & Coding	Supported
Automatic Channel Selection	Supported
Diversity	Supported
Spectrum View	Supported
Max Tx Power	5.8 GHz: 17.5dBm / total 36 dBm EIRP 5.4 GHz: 11.5 dBm / total 30 dBm EIRP 5.3 GHz: 5 dBm / total 23 dBm EIRP
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-9921-001X)
QoS	Packet classification to 4 queues according to 802.1p and Diffserv, Dynamic scheduling according to air interface changes
Packet processing	100,000 PPS
VLAN	Supported
Ethernet Ring Protection	Supported, including Ethernet 1+1
Hub Site Synchronization (HSS)	Up to 16 collocated links (RADWIN 2000 and/or WinLink 1000)
Monitored Hot Standby (MHS)	1+1 with RADWIN 2000 link or WinLink 1000 link

Supported Bands		
Band	Occupied Frequency Range	Radio Compliance
5.4 GHz ETSI*	5.475 - 5.720 GHz	ETSI EN 301 893
5.8 GHz ETSI	5.725 - 5.875 GHz	ETSI EN 302 502
5.3 GHz ETSI	5.150 - 5.350	ETSI EN 301 893

* Factory Default

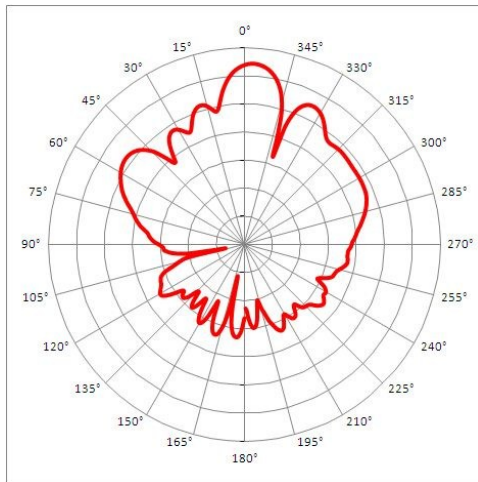
Mechanical	
Dimensions	19.5(w) x 27.0(h) x 9.0(d) cm
Weight	1.8 kg / 3.6 lbs
Power	
Power Feeding	Power provided over ODU-IDU cable
Power Consumption	<35W (IDU + ODU)
Environmental	
Operating Temperatures	-35°C - 60°C / -31°F - 140°F
Humidity	100% condensing, IP67 (totally protected against dust and 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

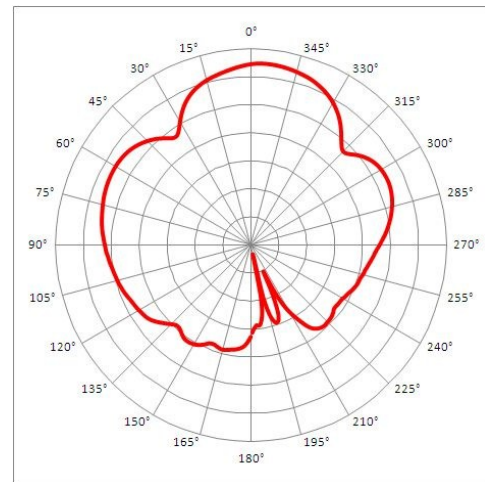
Minimum Peak Gain	15.0 ± 1.0 dBi @ 5.15-5.47 GHz 15.5 ± 1.0 dBi @ 5.47-5.875 GHz
VSWR	1.5 : 1 (typ) 2 : 1(max)
Azimuth 3 dB Beam width	35° (typ)
Elevation 3 dB Beam width	15° (typ)
AZ & EL Beam Squint	± 2.5° Port V & Port H
Polarization	Dual Linear (Vertical and Horizontal)
Side lobes Level	ETSI EN 302 085 V1.1.2, TS1-TS3
Cross Polarization	ETSI EN 302 085 V1.1.2, TS1-TS3
F/B Ratio	20 dB (max)
Port To Port Isolation	40 dB (min)
Lightning Protection	DC grounded

Antenna Pattern

Elevation @ 5.8GHz



Azimuth @ 5.8GHz



Ordering Information

Part Number: RW-2250-B350

Description:

RADWIN 2000 B- Series ODU with embedded antenna and connectorized, supporting multi frequency band 5.x GHz ETSI ,
Factory default 5.4 GHz ETSI

For external antennas, see the RADWIN Product Catalog.

Corporate Headquarters, T. +972.3.766.2900, E. sales@radwin.com, www.radwin.com

The RADWIN name is a registered trademark of RADWIN Ltd.
© All rights reserved, July 2011

DS RW-2250-B350/07.11

RADWIN