RADWIN A Model

Point-to-Point Radio - Data Sheet (RW2000/ODU/A/F24/FCC/INT/50M)

RW-2024-A150

Product Description

RW-2024-A150 is a carrier-class radio that belongs to the RADWIN 2000 A 50M Series and supports 2.4 GHz frequency band.

The Radio complies with FCC/IC regulations with a factory default of 2.4 GHz FCC/IC.

RW-2024-A150 delivers up to 50 Mbps throughput and up to 8xE1s/T1s over an extended range.
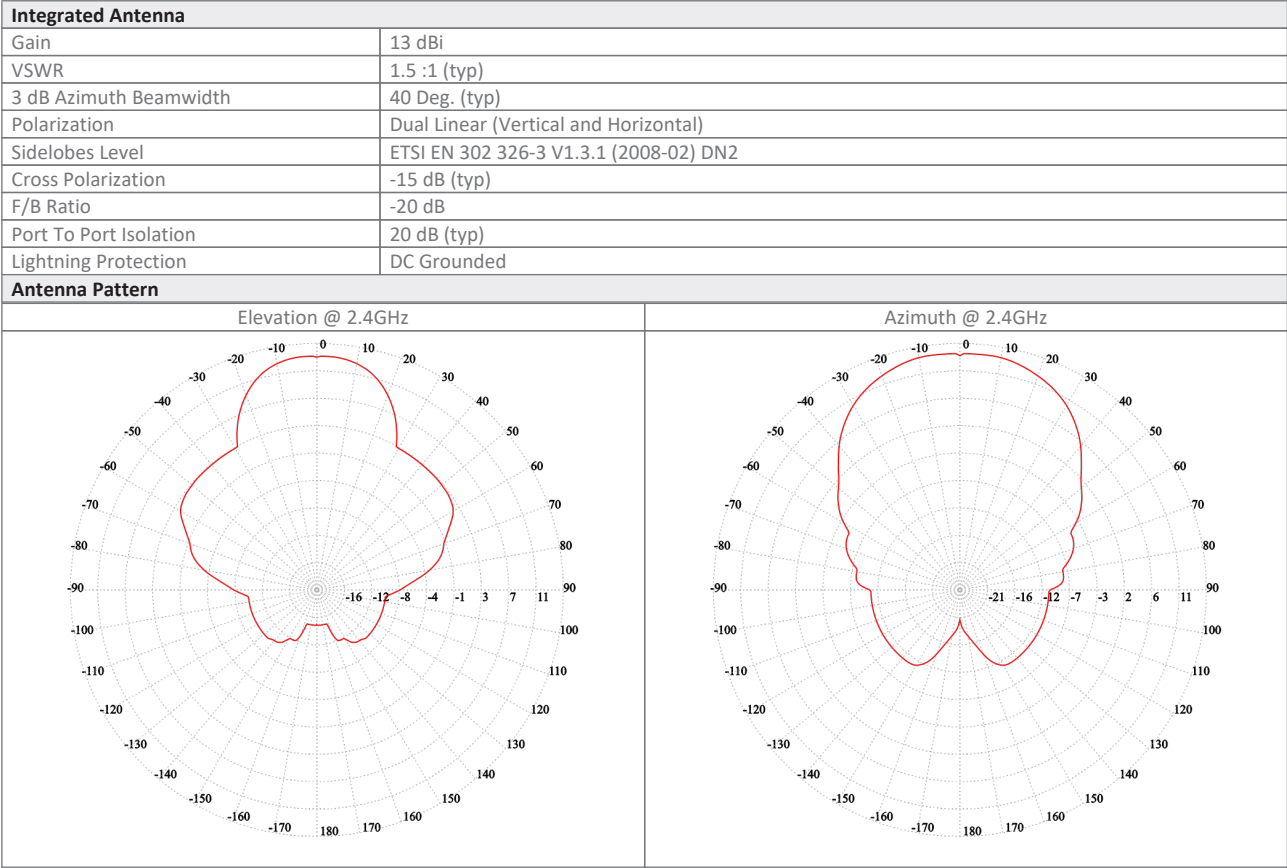
The radio comes with an integrated antenna.

Product Highlights

- 50 Mbps Ethernet net throughput and 8xE1s/T1s Native TDM interfaces
- Long range - Up to 40 km / 25 miles
- Telco-grade, extremely robust in harsh conditions
- Supports intra-site and inter-site synchronization to maximize capacity
- Adaptive asymmetric throughput – dynamic allocation between uplink and downlink
- Advanced OFDM & MIMO technologies for operation in nLOS/NLOS and dense radio environments

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Product Specifications:

Configuration	
Architecture	Outdoor Unit with an integrated antenna
PoE to ODU Interface	Outdoor CAT-5e; Maximum cable length: 100m for 10/100BaseT and 75m for 1000BaseT

Radio	
Max Capacity	50 Mbps net aggregate throughput (up to 8xE1s/T1s plus Ethernet)
Range	Up to 40 km / 25 miles *
Channel Bandwidth	Configurable: 5, 10, 20 MHz (for the default band)
Modulation	MIMO-OFDM (BPSK/QPSK/16QAM/64QAM)
Adaptive Modulation & Coding	Supported
Automatic Channel Selection	Supported
DFS	Not Supported
Diversity	Supported
Spectrum Viewer	Supported
Max Tx Power	26 dBm per chain
Duplex Technology	TDD
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6
Encryption	AES 128; FIPS 197
Support Indoor units	IDUs: RW-7100-2000, RW-7102-2000, RW-7216-2000, RW-7208-2000, RW-7204-2000, RW-7200-2000, RADWIN PoE devices (RW-9921-101X)
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
Ethernet Ring Protection	Supported, including Ethernet 1+1
TDD Intra Site Synchronization	Supported
TDD Inter Site Synchronization	Supported through common GPS receiver per site
Monitored Hot Standby	1+1 with RADWIN 2000 link

Supported Bands				
Band	**CBW 5MHz [GHz]**	**CBW 10MHz [GHz]**	**CBW 20MHz [GHz]**	**Radio Compliance**
2.4 GHz FCC/IC	2.4095-2.4645	2.407-2.467	2.402-2.472	FCC 47CFR Part 15.247; ISED RSS-210

Mechanical	
ODU Dimensions	24(w) x 20(h) x 8(d) cm
ODU Weight	1.5 kg / 3.31 lbs

Power	
Power Feeding	Power provided over ODU-IDU cable
Power Consumption	<12W

Environmental	
Operating Temperatures	-35°C to 60°C / -31°F to 140°F
Humidity	100% condensing, IP67 (totally protected against dust and against immersion in water up to 1m)

Safety	
US/CAN (cTUVus)	UL 60950-1, UL 60950-22, CAN/CSA C22.2 60950-1, CAN/CSA C22.2 60950-22
CE/IEC	EN/IEC 60950-1, EN/IEC 60950-22

EMC	
FCC	47 CFR, Part15, Subpart B, Class B
ETSI	EN 300 386, EN 301 489-1, EN 301 489-4
CAN/CSA-CEI/IEC	CISPR 22-2010 Class B

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Integrated Antenna	
Gain	13 dBi
VSWR	1.5 :1 (typ)
3 dB Azimuth Beamwidth	40 Deg. (typ)
Polarization	Dual Linear (Vertical and Horizontal)
Sidelobes Level	ETSI EN 302 326-3 V1.3.1 (2008-02) DN2
Cross Polarization	-15 dB (typ)
F/B Ratio	-20 dB
Port To Port Isolation	20 dB (typ)
Lightning Protection	DC Grounded

Antenna Pattern

Elevation @ 2.4GHz	Azimuth @ 2.4GHz

Ordering Info
Part Number: RW-2024-A150
Description: RADWIN A ODU, with an integrated antenna, supporting 2.4 GHz FCC/IC frequency band.

* May be limited by regulation in the specific band being used

Datasheet information can be changed by manufacturer without prior notice

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