



## RW-2050-0150

RW-2050-0150 is a carrier-class radio supporting the 5.x GHz bands and complying with FCC, IC (Canada), MII (China) and WPC (India) regulations (factory default: 5.8 GHz FCC).

The multi-band radio is part of the RADWIN 2000 L-Series which provides 50 Mbps symmetric throughput and a flexible combination of native TDM (up to 16 E1s/T1s) and Ethernet, enabling operators to cost-effectively support converged TDM and IP networks.

RADWIN RW-2050-0150 comes with an integrated antenna.

### Product Highlights

- 50 Mbps symmetric throughput
- Native TDM transport
- Long range – up to 120 km/75 miles
- 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
- Ease of operation and maintenance

### Product Specifications

Configuration	
<b>Architecture</b>	Outdoor Unit with Integrated Antenna
<b>IDU to ODU Interface</b>	Outdoor CAT-5e cable; Maximum cable length: 100 m
Radio	
<b>Capacity</b>	50 Mbps symmetric net throughput (up to 16 x E1s/T1s plus Ethernet)
<b>Range</b>	Up to 120 km / 75 miles
<b>Channel Bandwidth</b>	20 MHz
<b>Modulation</b>	2x2 MIMO-OFDM (BPSK/QPSK/16QAM/64QAM)
<b>Adaptive Modulation &amp; Coding</b>	Supported
<b>Automatic Channel Selection</b>	Supported
<b>Diversity</b>	Supported
<b>Spectrum View</b>	Supported
<b>Max Tx Power</b>	25 dBm
<b>Duplex Technology</b>	TDD
<b>Error Correction</b>	FEC k = 1/2, 2/3, 3/4, 5/6
<b>Encryption</b>	AES 128
<b>Supported Indoor Units</b>	IDU-C Series (RW-72XX-2000)
<b>Hub Site Synchronization (HSS)</b>	Up to 16 collocated links (RADWIN 2000 and/or WinLink 1000)
<b>Monitored Hot Standby (MHS)</b>	1+1 with RADWIN 2000 link or WinLink 1000 link

Supported Bands		
Band	Occupied Frequency Range	Radio Compliance
5.9 GHz Universal	5.730 - 5.950 GHz	
<b>5.8 GHz FCC/IC*</b>	<b>5.725 - 5.850 GHz</b>	<b>FCC 47CFR, Part 15, Subpart C and IC RSS-210</b>
5.8 GHz MII China	5.730 - 5.845 GHz	MI I for 5.8 GHz
5.8 GHz WPC India	5.825 - 5.875 GHz	WPC GSR-38
5.4 GHz FCC	5.480 - 5.715 GHz	FCC 47CFR, Part 15, Subpart E
5.4 GHz IC	5.480 - 5.715 GHz	IC RSS-210
5.4 GHz Universal	5.490 - 5.710 GHz	
5.3 GHz FCC/IC	5.260 - 5.340 GHz	FCC 47CFR, Part 15, Subpart E and IC RSS-210
5.3 GHz Universal	5.140 - 5.345 GHz	

\* Factory default



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<b>Mechanical</b>	
<b>Dimensions</b>	37.1(w) x 37.1(h) x 11.0(d) cm
<b>Weight</b>	3.5 kg / 7 lbs
<b>Power</b>	
<b>Power Feeding</b>	Power provided over ODU-IDU cable
<b>Power Consumption</b>	<35W (IDU + ODU)
<b>Environmental</b>	
<b>Operating Temperatures</b>	-35°C - 60°C / -31°F - 140°F
<b>Humidity</b>	100% condensing, IP67 (totally protected against dust and against immersion up to 1m)
<b>Safety</b>	
<b>FCC/IC (cTUVus)</b>	UL 60950-1, UL 60950-22, CAN/CSA C22.2 60950-1, CAN/CSA C22.2 60950-22
<b>ETSI</b>	EN/IEC 60950-1, EN/IEC 60950-22
<b>EMC</b>	
<b>FCC</b>	CFR47 Class B, Part15, Subpart B
<b>ETSI</b>	EN 300 386, EN 301 489-1, EN 301 489-4
<b>CAN/CSA-CEI/IEC</b>	CISPR 22-04 Class B
<b>AS/NZS</b>	CISPR 22-2004 Class B
<b>Integrated Antenna</b>	
<b>Minimum Peak Gain</b>	22.5 dBi ± 0.5 @ 5.15-5.25 GHz 23 dBi ± 0.5 @ 5.25-5.875 GHz
<b>VSWR</b>	1.5 : 1 (typ) 1.7 : 1 (max)
<b>3 dB Beamwidth</b>	9° (typ)
<b>AZ &amp; EL Beam Squint</b>	± 2° Port V & Port H
<b>Polarization</b>	Dual Linear (Vertical and Horizontal)
<b>Sidelobes Level</b>	ETSI EN 302 085 V1.1.2, TS1-TS3
<b>Cross Polarization</b>	ETSI EN 302 085 V1.1.2, TS1-TS3
<b>F/B Ratio</b>	-35 dB (max)
<b>Port To Port Isolation</b>	40 dB (min)
<b>Lightning Protection</b>	DC grounded
<b>Antenna Pattern</b>	
At 5.8 GHz, horizontal	At 5.8 GHz, vertical

#### Ordering Information

**Part Number:** RW-2050-0150

**Description:** RADWIN 2000 L-Series ODU with integrated antenna, supporting multi frequency bands at 5.x GHz, factory default 5.8 GHz FCC/IC