



RW-2050-0110

RADWIN RW-2050-0110 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). The multi-band radio is part of the RADWIN 2000 PDH Series which delivers 16 E1s/T1s and 10 Mbps Ethernet throughput at ranges of up to 120 km/75 miles.

The RADWIN 2000 PDH Series is designed to address carriers' cellular backhaul requirements, providing high-end performance, capacity and range never before seen in its price category.

RADWIN RW-2050-0110 comes with an integrated antenna.

Product Highlights

- Up to 16 x E1s/T1s plus 10 Mbps Ethernet throughput
- Native TDM transport
- Long range – up to 120 km/75 miles
- Single radio supporting multiple bands (5.x GHz)
- Superior spectral efficiency
- 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	
Architecture	Outdoor Unit with Integrated Antenna
IDU to ODU Interface	Outdoor CAT-5e cable; Maximum cable length: 100 m
Radio	
Capacity	Up to 16 E1s/T1s and 10 Mbps full-duplex Ethernet net throughput
Range	Up to 120 km / 75 miles
Channel Bandwidth	20 MHz
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)
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
5.9 GHz Universal	5.730 - 5.950 GHz	
5.8 GHz FCC/IC*	5.725 - 5.850 GHz	FCC 47CFR, Part 15, Subpart C and IC RSS-210
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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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	22.5 dBi ± 0.5 @ 5.15-5.25 GHz 23 dBi ± 0.5 @ 5.25-5.875 GHz
VSWR	1.5 : 1 (typ) 1.7 : 1 (max)
3 dB Beamwidth	9° (typ)
AZ & EL Beam Squint	± 2° Port V & Port H
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 Pattern	
At 5.8 GHz, horizontal	At 5.8 GHz, vertical

Ordering Information

Part Number: RW-2050-0110

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