

## RADWIN 2000 C-Series



### RW-2960-0100

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RW-2960-0100 is a carrier-class radio supporting the 4.9 to 6 GHz bands and (factory default: 5.8 GHz FCC/ IC).

The multi-band radio is part of the RADWIN 2000 C-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 C-Series provides 200 Mbps net throughput (up to 16 E1/T1 plus Ethernet) at a range of up to 120 km/75 miles.

RADWIN RW-2960-0100 comes with an integrated antenna.

#### Product Highlights

- 200 Mbps Ethernet net throughput and up to 16E1s/T1s
- Native TDM transport
- GBE support
- Long range – up to 120 km/75 miles
- Adaptive asymmetric throughput dynamic allocation between uplink and downlink
- Single radio supporting multiple bands 4.9 GHz to 6GHz (factory default: 5.8 GHz FCC/ IC)
- 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	Outdoor Unit with Integrated Antenna
IDU to ODU Interface	Outdoor CAT-5e cable; Maximum cable length: 100m @100BaseT and 70m @1000BaseT
Radio	
Capacity	200 Mbps net throughput (up to 16E1s/T1s plus Ethernet)
Range	Up to 120 km / 75 miles
Channel Bandwidth	Configurable 5, 10, 20 or 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	4.9, 5.x and 6 GHz: 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-9921-001X)
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 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
6 GHz Universal	5.690 - 6.060 GHz	
5.9 GHz Universal	5.730 - 5.950	
<b>5.8 GHz FCC/IC *</b>	<b>5.725 - 5.850*</b>	<b>FCC 47CFR, Part 15, Subpart C and IC RSS-210</b>
5.4 GHz Universal	5.475 - 5.720	
5.3 GHz Universal	5.140 - 5.345	
4.9 GHz Universal	4.890 - 5.010	

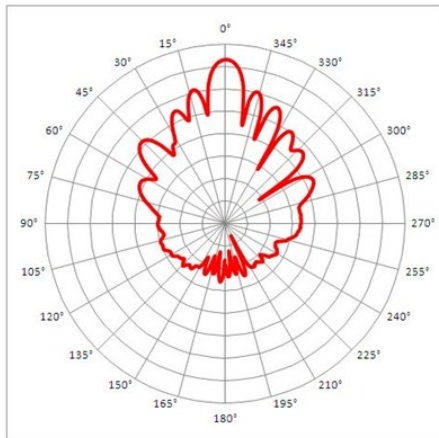
### \* Factory Default

Mechanical	
Dimensions	19.5(w) x 27.0(h) x 8.0(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

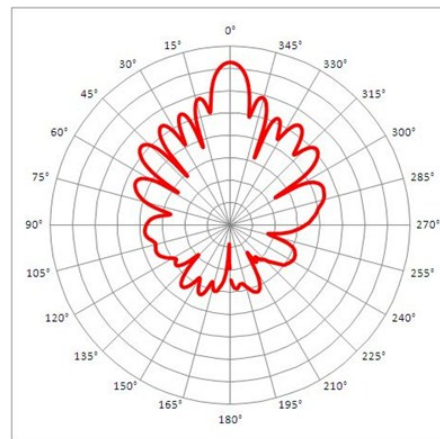
## Integrated Antenna

<b>Minimum Peak Gain</b>	22.5 dBi $\pm$ 0.5 @ 5.15-5.25 GHz
	23 dBi $\pm$ 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>	$\pm$ 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

Elevation @ 5.8GHz



Azimuth @ 5.8GHz



## Ordering Information

**Part Number:** RW-2960-0100

**Description:**

RADWIN 2000 C- Series ODU with integrated antenna supporting 4.9 to 6 GHz bands regulations, factory default: 5.8GHz FCC/ IC.

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

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