

## RADWIN 2000 C-Series



### RW-2923-0100

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RW-2923-0100 is a carrier-class radio supporting the 2.3 GHz band. The radio is part of the RADWIN 2000 C-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 C-Series provides 100 Mbps net throughput (up to 16 E1/T1 plus Ethernet) at a range of up to 120 km/75 miles.

RADWIN RW-2923-0100 comes with an integrated antenna.

#### Product Highlights

- 100 Mbps Ethernet net throughput and up to 16 E1s/T1s
- Native TDM transport
- Long range – up to 120 km/75 miles
- Adaptive asymmetric throughput – dynamic allocation between uplink and downlink
- 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  |
| Radio                          |   |
| Capacity                       | 100 Mbps net aggregate throughput (up to 16 E1s/T1s plus Ethernet)  |
| Range                          | Up to 120 km / 75 miles   |
| Channel Bandwidth              | Configurable: 10, 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), 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                             |
| 2.3 GHz Universal* | 2.297—2.482 GHz*         |  |
| 2.4GHz FCC/IC      | 2.402—2.472              | FCC 47CFR, Part 15, Subpart C and IC RSS-210 |

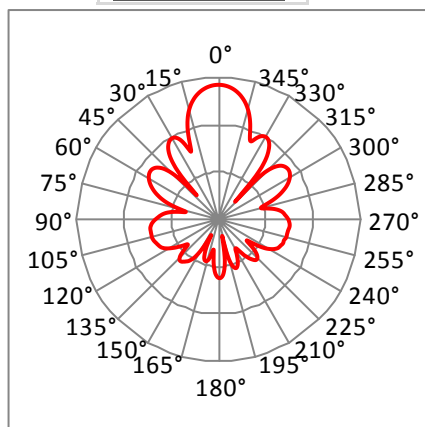
\* Factory Default

| 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   |

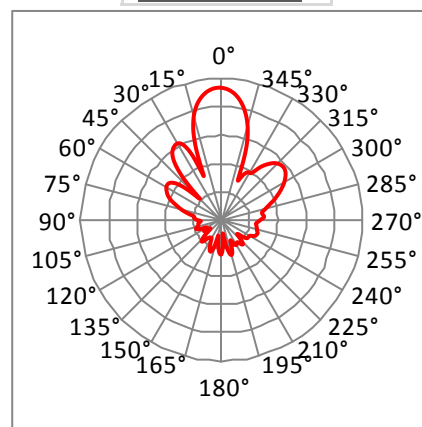
### Integrated Antenna

|                        |  |
|------------------------|--|
| FREQUENCY RANGE        | 2.3 - 2.7 GHz                                |
| Minimum Peak Gain      | 19 ± 1 dBi                                   |
| VSWR                   | 2.0 : 1 (max) 1.5 : 1 (typ)                  |
| 3 dB BEAMWIDTH         | 16° (typ)                                    |
| AZ & EL BEAM SQUINT    | Port V & Port H ±2°                          |
| POLARIZATION           | Dual Linear (Vertical and Horizontal)        |
| SIDELOBES LEVEL        | ETSI EN 302 326-3 V1.1.2. DN4                |
| CROSS POLARIZATION     | ETSI EN 302 326-3 V1.1.2. DN4                |
| F/B RATIO              | ETSI EN 302 326-3 V1.1.2. DN4<br>30 dB (max) |
| PORT TO PORT ISOLATION | 30 dB (min)                                  |
| INPUT IMPEDANCE        | 50 (ohm)                                     |
| INPUT POWER            | 6W (max)                                     |
| LIGHTNING PROTECTION   | DC grounded                                  |

Elevation @ 2.5GHz



Azimuth @ 2.5GHz



## Ordering Information

Part Number: RW-2923-0100

### Description:

RADWIN 2000 C-Series ODU with integrated antenna, supporting multi frequency bands at 5.x GHz, factory default 5.4 GHz Universal

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