

**RW-2964-0100****RW-2964-0100**

RW-2964-0100 is a carrier-class radio supporting the 5.890 -6.410 GHz band. This radio is part of the RADWIN 2000 C-Series that delivers highest capacity and extended range for carriers' backhaul needs

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Packing native TDM and Ethernet over a single wireless link, the RADWIN 2000 C-Series provides 100 Mbps net aggregate throughput (up to 8E1/T1plus Ethernet) at a range of up to 120 km/75 miles.

RADWIN RW-2964-0100 comes with an integrated antenna.

**Product Highlights**

- 100 Mbps Ethernet net throughput and up to 16E1s/T1s
- Native TDM transport
- Long range – up to 120 km/75 miles
- Adaptive asymmetric throughput – dynamic allocation between uplink and downlink
- Single radio supporting 5.890 -6.410 GHz band
- 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: 100 m   |
| Radio                          |   |
| Capacity                       | 100 Mbps net aggregate throughput (up to 16E1s/T1s plus Ethernet)   |
| Range                          | Up to 120 km / 75 miles   |
| Channel Bandwidth              | Configurable: 10 or 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-9921-101X)                                 |
| Packet processing              | 100,000 PPS   |
| 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  |

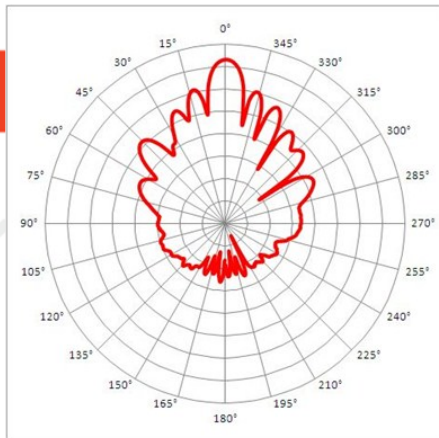
| Supported Bands   |                          |                  |
|-------------------|--------------------------|------------------|
|                   | Occupied Frequency Range |                  |
| Band              | Channel BW 10MHz         | Channel BW 20MHz |
| 6.4 GHz Universal | 5.895-6.405 GHz          | 5.890-6.410 GHz  |

| 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 | -40°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   |

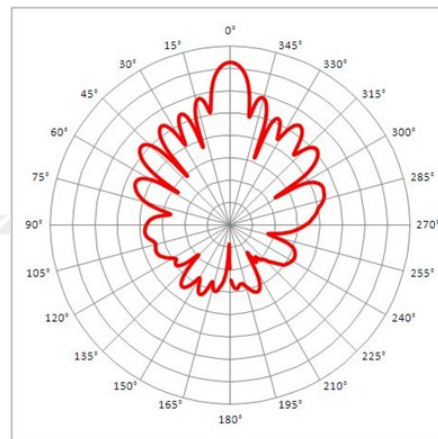
### Integrated Antenna

|                               |                                       |
|-------------------------------|---------------------------------------|
| <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</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 @ 6.0GHz



Azimuth @ 6.0GHz



## Ordering Information

**Part Number:** RW-2964-0100

**Description:**

RADWIN 2000 C-Series ODU with integrated antenna, ( 2x N-type), supporting frequency 6.4 GHz Universal

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