

## **RADWIN Subscriber Units, SU PRO Model**

Subscriber Unit - Data Sheet (RW5000/SU-Pro/5HC5/F58/FCC/INT)



**RW-5HC5-0P58**

### **Product Description**

RW-5HC5-0P58 is SU PRO Model, subscriber unit that delivers up to 500 Mbps net aggregate throughput and supports SLA (CIR) or Best-Effort service level.

Can be used in a P2P configuration

SU PRO supports 4.9 to 5.8 GHz and complies with FCC/IC & FCC regulations.

The unit includes an integrated 22dBi antenna.

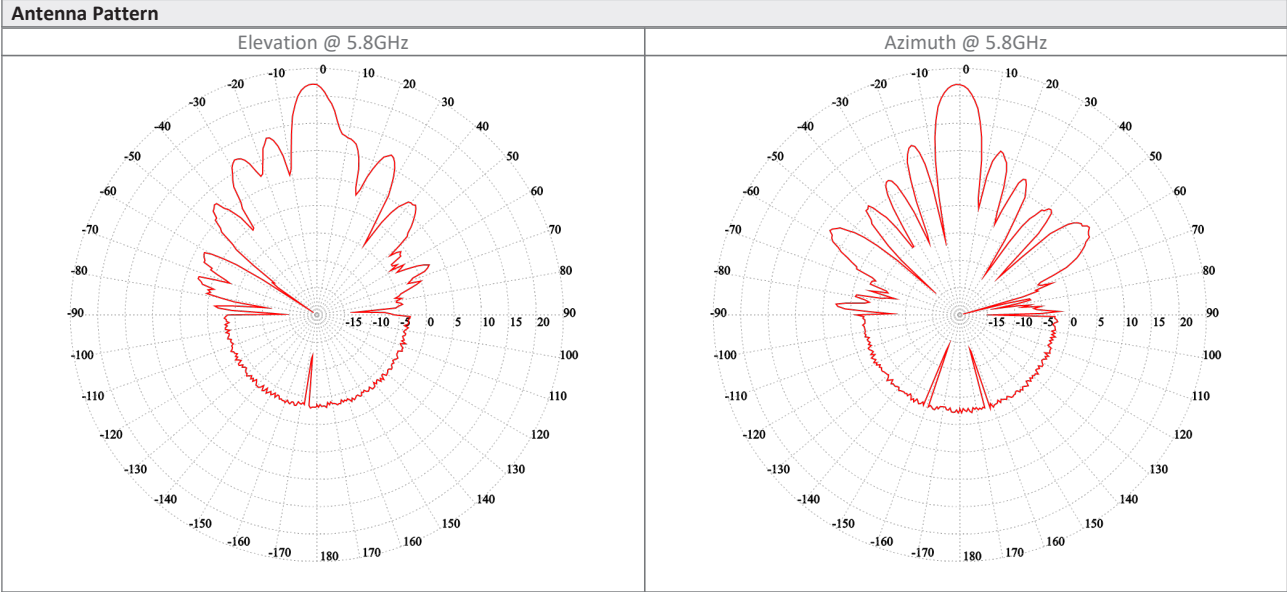
### **Product Highlights**

- Up to 500 Mbps net aggregated throughput
- Long range - Up to 40 km / 25 miles
- Guaranteed Service Level Agreement based on CIR or Best Effort Service level
- 22dBi antenna gain
- Short and constant latency
- Advanced MIMO, OFDM and Antenna Diversity
- Robust and reliable operation in harsh environmental conditions including obstructed line-of-sight scenarios
- IP-67
- Simplified installation using a Smartphone app.

## Product Specifications:

|                              |  |                 |                 |                 |   |
|------------------------------|--|-----------------|-----------------|-----------------|---|
| Configuration                |  |                 |                 |                 |   |
| Architecture                 | Outdoor Unit with an integrated antenna  |                 |                 |                 |   |
| PoE to ODU Interface         | Outdoor CAT-5e; Maximum cable length: 100m for 10/100BaseT and 75m for 1000BaseT                                     |                 |                 |                 |   |
| Radio                        |  |                 |                 |                 |   |
| Max Capacity                 | 500 Mbps net aggregate throughput (up to 250 Mbps per direction)   |                 |                 |                 |   |
| Range                        | Up to 40 km / 25 miles *   |                 |                 |                 |   |
| Channel Bandwidth            | Configurable: 10, 20, 40, 80 MHz (for the default band)  |                 |                 |                 |   |
| Modulation                   | MIMO-OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)   |                 |                 |                 |   |
| Adaptive Modulation & Coding | Supported  |                 |                 |                 |   |
| Automatic Channel Selection  | Supported upon power up  |                 |                 |                 |   |
| DFS                          | Supported (FCC/IC, FCC)  |                 |                 |                 |   |
| Diversity                    | Supported  |                 |                 |                 |   |
| Max Tx Power                 | 26 dBm per chain   |                 |                 |                 |   |
| Duplex Technology            | TDD  |                 |                 |                 |   |
| Error Correction             | FEC k = 1/2, 2/3, 3/4, 5/6   |                 |                 |                 |   |
| Encryption                   | AES 128 (Supports AES 256 in PtP mode)   |                 |                 |                 |   |
| Uplink / Downlink Allocation | Configurable: Symmetric or Asymmetric  |                 |                 |                 |   |
| Layer 2                      | HUB Mode   |                 |                 |                 |   |
| QoS                          | Packet classification to 4 priority queues according to 802.1P or Diffserv   |                 |                 |                 |   |
| VLAN Support                 | 802.1Q, QinQ, 4094 VLANs   |                 |                 |                 |   |
| ODU Management               | IPv4/IPv6 dual-stack; SNMPv1, SNMPv3; HTTP/HTTPS using web browser   |                 |                 |                 |   |
| 802.1x                       | Supported  |                 |                 |                 |   |
| Option 82                    | Supported  |                 |                 |                 |   |
| Non PPPoE filtering          | Supported  |                 |                 |                 |   |
| DHCP Filter                  | Supported  |                 |                 |                 |   |
| IGMP snooping                | Supported  |                 |                 |                 |   |
| Nomadic subscribers          | Supported  |                 |                 |                 |   |
| RADIUS Authorization         | Supported  |                 |                 |                 |   |
| RADIUS User authentication   | Supported  |                 |                 |                 |   |
| Syslog                       | Supported  |                 |                 |                 |   |
| Supported Bands              |  |                 |                 |                 |   |
| Band                         | CBW 10MHz [GHz]  | CBW 20MHz [GHz] | CBW 40MHz [GHz] | CBW 80MHz [GHz] | Radio Compliance                          |
| 4.9 GHz FCC/IC               | 4.940-4.990  | 4.940-4.990     | 4.940-4.990     | -               | FCC 47CFR Part 90 Subpart Y; ISED RSS-111 |
| 5.1 GHz FCC                  | 5.170-5.250  | 5.170-5.250     | 5.170-5.250     | 5.170-5.250     | FCC 47CFR Part 15.407                     |
| 5.1 GHz FCC                  | 5.170-5.845  | 5.170-5.845     | 5.170-5.845     | 5.170-5.845     | FCC 47CFR Part 15.407                     |
| 5.2 GHz FCC/IC               | -  | 5.255-5.340     | 5.255-5.340     | 5.250-5.340     | FCC 47CFR Part 15.407                     |
| 5.4 GHz FCC                  | -  | 5.480-5.715     | 5.480-5.715     | 5.485-5.715     | FCC 47CFR Part 15.407                     |
| 5.8 GHz FCC/IC (default)     | 5.730-5.845  | 5.730-5.845     | 5.730-5.845     | 5.730-5.845     | FCC 47CFR Part 15.407; ISED RSS-247       |
| Mechanical                   |  |                 |                 |                 |   |
| ODU Dimensions               | 32.5(w) x 32.5(h) x 6.7(d) cm  |                 |                 |                 |   |
| ODU Weight                   | 2 kg / 4.41 lbs  |                 |                 |                 |   |
| Mounting Kit                 | Included   |                 |                 |                 |   |
| Power                        |  |                 |                 |                 |   |
| Power Feeding                | Power provided over ODU-IDU cable  |                 |                 |                 |   |
| Power Consumption            | <13W   |                 |                 |                 |   |
| Network Device               |  |                 |                 |                 |   |
| AC POE                       | RW-9921-102x (included)  |                 |                 |                 |   |
| DC POE                       | RW-9921-2069   |                 |                 |                 |   |
| Package Content              |  |                 |                 |                 |   |
| Package                      | Radio unit with integrated antenna, pole/wall mounting kit, IP67 gland for POE port, 24V POE unit and AC Power cable |                 |                 |                 |   |
| Environmental                |  |                 |                 |                 |   |
| Operating Temperatures       | -35°C to 60°C / -31°F to 140°F   |                 |                 |                 |   |
| Humidity                     | 100% condensing, IP67 (totally protected against dust and against immersion in water up to 1m)                       |                 |                 |                 |   |
| MTBF                         | 4,075,000 hours (Telcordia SR332 @25°C)  |                 |                 |                 |   |
| Wind Resistance operational  | 180Km/h  |                 |                 |                 |   |
| Safety                       |  |                 |                 |                 |   |
| EU/Intl                      | EN/IEC 62368-1, EN/IEC 60950-22  |                 |                 |                 |   |
| USA                          | cTUVus: UL 62368-1:2014, UL 60950-22   |                 |                 |                 |   |
| EMC                          |  |                 |                 |                 |   |
| FCC                          | FCC 47 CFR, Part15, Subpart B, Class B   |                 |                 |                 |   |
| ETSI                         | ETSI EN 301 489-1, ETSI EN 301 489-4, ETSI 301 489-17  |                 |                 |                 |   |
| Canada                       | ICES-003, CISPR 32, Class B  |                 |                 |                 |   |
| AS/NZS                       | CISPR 32, Class B  |                 |                 |                 |   |

| Integrated Antenna       |                                       |
|--------------------------|---------------------------------------|
| Gain                     | 22 dBi                                |
| Detailed Gain            | 22.0 +/- 1.0 dBi                      |
| VSWR                     | 2.0 : 1                               |
| 3 dB Azimuth Beamwidth   | 10 Deg. (Typ)                         |
| 3 dB Elevation Beamwidth | Deg. (Typ)                            |
| Polarization             | Dual Linear (Vertical and Horizontal) |
| Sidelobes Level          | -12 dB(typ)                           |
| Cross Polarization       | -25dB (typ)                           |
| F/B Ratio                | -25 dB                                |
| Port To Port Isolation   | 30 dB (typ)                           |
| Lightning Protection     | DC Grounded                           |



**Ordering Info**  
**Part Number:** RW-5HC5-0P58  
**Description:** RADWIN SU PRO ODU, with an integrated antenna, supporting multi frequency bands at 5.x GHz, factory default 5.8 GHz FCC/IC.

\* May be limited by regulation in the specific band being used

Datasheet information can be changed by manufacturer without prior notice