RADWIN Subscriber Units, SU AIR Model

Subscriber Unit - Data Sheet (RW5000/SU-Air/5H50/F54/UNI/INT)



RW-5H50-9A50

Product Description

RW-5H50-9A50 is SU AIR, Integrated subscriber unit that delivers up to 50 Mbps net aggregate throughput and supports Best-Effort service level.

SU AIR supports 4.9 to 6 GHz and complies with Universal & UBR regulations.

The unit includes an integrated 22dBi antenna.

Product Highlights

- Up to 50 Mbps net aggregated throughput, upgradable to 250Mbps
- Long range Up to 40 km / 25 miles
- 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 v | vith an integrated | antenna | | | |
| PoE to ODU Interface | | | | r 10/100BaseT and 75m for 1000BaseT | | |
| Radio | | | | ., | | |
| Max Capacity | 50 Mbps net as | gregate through | out: Ungradable to | n 250 Mhns with license key | | |
| Channel Bandwidth | | 50 Mbps net aggregate throughput; Upgradable to 250 Mbps with license key Configurable: 10, 20, 40, 80 MHz (for the default band); Dynamic Channel BW selection (20/40/80 MHz) | | | | |
| Modulation | MIMO-OFDM (BPSK/QPSK/16QAM/64QAM/256QAM) | | | | | |
| Adaptive Modulation & Coding | Supported | | | | | |
| DFS | Not Supported | - 11 | | | | |
| Diversity | Supported | | | | | |
| Max Tx Power | 26 dBm per chain | | | | | |
| Duplex Technology | TDD | | | | | |
| Error Correction | | 1 | | | | |
| Encryption | AES 128 | FEC k = 1/2, 2/3, 3/4, 5/6 | | | | |
| Support Indoor units | | ovices (0021 102) | V included in the | madiaga) | | |
| Uplink / Downlink Allocation | RADWIN PoE devices (9921-102X, included in the package) Configurable: Symmetric or Asymmetric | | | | | |
| | | symmetric or Asyr | mmetric | | | |
| Layer 2 | + | HUB Mode Packet classification to 4 priority queues according to 802.1P or Diffserv | | | | |
| QoS | | | queues according | R TO 905.TL OL DILLSELA | | |
| 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 | | | | | |
| RADIUS Authorization | Supported | | | | | |
| RADIUS User authentication | Supported | | | | | |
| Syslog | Supported | | | | | |
| Supported Bands | | | | | | |
| Band | CBW 20MHz | CBW 40MHz | CBW 80MHz [GHz] | Radio Compliance | | |
| | [GHz] | [GHz] | | | | |
| 5.4 GHz Universal (default) | [GHz] 5.465-5.730 | 5.455-5.740 | 5.455-5.760 | Universal | | |
| 5.4 GHz Universal (default) 4.9 GHz Universal | + | + | 5.455-5.760 4.900-4.995 | Universal Universal | | |
| , , | 5.465-5.730 | 5.455-5.740 | | | | |
| 4.9 GHz Universal | 5.465-5.730 4.900-4.995 | 5.455-5.740 4.900-4.995 | 4.900-4.995 | Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 | 4.900-4.995 5.680-6.090 5.710-5.990 | Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 | Universal Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal 5.1 GHz Universal | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 5.140-5.345 | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 5.130-5.355 | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 5.130-5.375 | Universal Universal Universal Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal 5.1 GHz Universal 5.1 GHz UBR | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 | Universal Universal Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal 5.1 GHz Universal 5.1 GHz UBR Mechanical | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 5.140-5.345 5.125-5.880 | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 5.130-5.355 5.125-5.880 | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 5.130-5.375 | Universal Universal Universal Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal 5.1 GHz Universal 5.1 GHz Universal 6.1 GHz UBR Mechanical ODU Dimensions | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 5.140-5.345 5.125-5.880 32.5(w) x 32.5(| 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 5.130-5.355 5.125-5.880 | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 5.130-5.375 | Universal Universal Universal Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal 5.1 GHz Universal 5.1 GHz Universal 6.1 GHz UBR Mechanical ODU Dimensions ODU Weight | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 5.140-5.345 5.125-5.880 | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 5.130-5.355 5.125-5.880 | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 5.130-5.375 | Universal Universal Universal Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal 5.1 GHz Universal 5.1 GHz Universal 6.0 GHz Universal 6.1 GHz Universal 6.1 GHz UBR 6.1 GHz UBR 7.1 GHz UBR 8.2 Mechanical 9.0 DU Dimensions 9.0 DU Weight 9.0 Power | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 5.140-5.345 5.125-5.880 32.5(w) x 32.5(2 kg / 4.41 lbs | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 5.130-5.355 5.125-5.880 h) x 6.4(d) cm | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 5.130-5.375 5.125-5.880 | Universal Universal Universal Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal 5.1 GHz Universal 5.1 GHz Universal 6.0 GHz Universal 6.1 GHz Universal 6.1 GHz UBR 6.1 GHz UBR 7.1 GHz UBR 7.2 Mechanical 8.3 ODU Dimensions 8.4 ODU Weight 8.5 ODU Weight | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 5.140-5.345 5.125-5.880 32.5(w) x 32.5(2 kg / 4.41 lbs | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 5.130-5.355 5.125-5.880 | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 5.130-5.375 5.125-5.880 | Universal Universal Universal Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal 5.1 GHz Universal 5.1 GHz Universal 6.0 GHz Universal 6.1 GHz Universal 6.1 GHz UBR 6.1 GHz UBR 7.1 GHz UBR 7.2 Mechanical 8.3 ODU Dimensions 9.3 ODU Weight 9.4 OWER 9.5 ODU Weight 9.5 ODU | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 5.140-5.345 5.125-5.880 32.5(w) x 32.5(2 kg / 4.41 lbs | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 5.130-5.355 5.125-5.880 h) x 6.4(d) cm | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 5.130-5.375 5.125-5.880 | Universal Universal Universal Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal 5.1 GHz Universal 5.1 GHz UBR Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 5.140-5.345 5.125-5.880 32.5(w) x 32.5(2 kg / 4.41 lbs | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 5.130-5.355 5.125-5.880 h) x 6.4(d) cm | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 5.130-5.375 5.125-5.880 | Universal Universal Universal Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal 5.1 GHz Universal 5.1 GHz UBR Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental Operating Temperatures | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 5.140-5.345 5.125-5.880 32.5(w) x 32.5(2 kg / 4.41 lbs Power provided | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 5.130-5.355 5.125-5.880 h) x 6.4(d) cm | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 5.130-5.375 5.125-5.880 | Universal Universal Universal Universal Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal 5.1 GHz Universal 5.1 GHz UBR Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental Operating Temperatures Humidity | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 5.140-5.345 5.125-5.880 32.5(w) x 32.5(2 kg / 4.41 lbs Power provided | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 5.130-5.355 5.125-5.880 h) x 6.4(d) cm | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 5.130-5.375 5.125-5.880 | Universal Universal Universal Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal 5.1 GHz Universal 5.1 GHz UBR Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental Operating Temperatures Humidity Safety | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 5.140-5.345 5.125-5.880 32.5(w) x 32.5(2 kg / 4.41 lbs Power provider <13W | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 5.130-5.355 5.125-5.880 h) x 6.4(d) cm d over ODU-IDU co | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 5.130-5.375 5.125-5.880 able | Universal Universal Universal Universal Universal Universal Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal 5.1 GHz Universal 5.1 GHz UBR Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental Operating Temperatures Humidity Safety US/CAN (cTUVus) | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 5.140-5.345 5.125-5.880 32.5(w) x 32.5(2 kg / 4.41 lbs Power provided 13W -35°C to 60°C / 100% condension | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 5.130-5.355 5.125-5.880 h) x 6.4(d) cm d over ODU-IDU co | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 5.130-5.375 5.125-5.880 able | Universal Universal Universal Universal Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal 5.1 GHz Universal 5.1 GHz UBR Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental Operating Temperatures Humidity Safety US/CAN (cTUVus) CE/IEC | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 5.140-5.345 5.125-5.880 32.5(w) x 32.5(2 kg / 4.41 lbs Power provided 13W -35°C to 60°C / 100% condension | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 5.130-5.355 5.125-5.880 h) x 6.4(d) cm d over ODU-IDU co | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 5.130-5.375 5.125-5.880 able | Universal Universal Universal Universal Universal Universal Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal 5.1 GHz Universal 5.1 GHz UBR Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental Operating Temperatures Humidity Safety US/CAN (cTUVus) CE/IEC EMC | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 5.140-5.345 5.125-5.880 32.5(w) x 32.5(2 kg / 4.41 lbs Power provided 13W -35°C to 60°C / 100% condension UL 60950-1, UL 60950-1, UL 60950-1 | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 5.130-5.355 5.125-5.880 h) x 6.4(d) cm d over ODU-IDU co -31°F to 140°F ng, IP67 (totally position of the company of | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 5.130-5.375 5.125-5.880 able ccccccccccccccccccccccccccccccccccc | Universal Universal Universal Universal Universal Universal Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal 5.1 GHz Universal 5.1 GHz UBR Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental Operating Temperatures Humidity Safety US/CAN (cTUVus) CE/IEC EMC FCC | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 5.140-5.345 5.125-5.880 32.5(w) x 32.5(2 kg / 4.41 lbs Power provider <13W -35°C to 60°C / 100% condensi UL 60950-1, UL EN/IEC 60950-1 47 CFR, Part15, | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 5.130-5.355 5.125-5.880 h) x 6.4(d) cm d over ODU-IDU co -31°F to 140°F ng, IP67 (totally position of the company of | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 5.130-5.375 5.125-5.880 able able accordance description of the control of | Universal Universal Universal Universal Universal Universal Universal Universal | | |
| 4.9 GHz Universal 6.0 GHz Universal 5.9 GHz Universal 5.8 GHz Universal 5.1 GHz Universal 5.1 GHz UBR Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental Operating Temperatures Humidity Safety US/CAN (cTUVus) CE/IEC EMC | 5.465-5.730 4.900-4.995 5.690-6.060 5.720-5.960 5.725-5.850 5.140-5.345 5.125-5.880 32.5(w) x 32.5(2 kg / 4.41 lbs Power provider <13W -35°C to 60°C / 100% condensi UL 60950-1, UL EN/IEC 60950-2 47 CFR, Part15, EN 301 489-1, | 5.455-5.740 4.900-4.995 5.680-6.070 5.710-5.970 5.725-5.850 5.130-5.355 5.125-5.880 h) x 6.4(d) cm d over ODU-IDU co -31°F to 140°F ng, IP67 (totally position of the company of | 4.900-4.995 5.680-6.090 5.710-5.990 5.725-5.850 5.130-5.375 5.125-5.880 able able accordance description of the control of | Universal Universal Universal Universal Universal Universal Universal Universal | | |



| Integrated Antenna | | | | |
|---|--|---|--|--|
| Gain | 21 dBi | | | |
| VSWR | 2.0:1 | | | |
| 3 dB Azimuth Beamwidth | 10 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 | | | |
| Antenna Pattern | | | | |
| Elevation @ 5. | 4GHz | Azimuth @ 5.4GHz | | |
| -100 -110 -120 -130 -140 -150 -160 -170 180 | 30 40 50 60 70 80 80 100 110 120 130 140 150 | -100 -100 -100 -100 -100 -100 -100 -100 | | |

Ordering Info

Part Number: RW-5H50-9A50

Description: RADWIN SU AIR ODU, with an integrated antenna, supporting multi frequency bands at 5.x GHz, factory default 5.4 GHz Universal.

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

Datasheet information can be changed by manufacturer without prior notice

