RADWIN Subscriber Units, SU PRO Model

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

RW-5H50-9P54

Product Description

RW-5H50-9P54 is SU PRO, Integrated subscriber unit that delivers up to 50 Mbps net aggregate throughput and supports SLA (CIR) or Best-Effort service level.
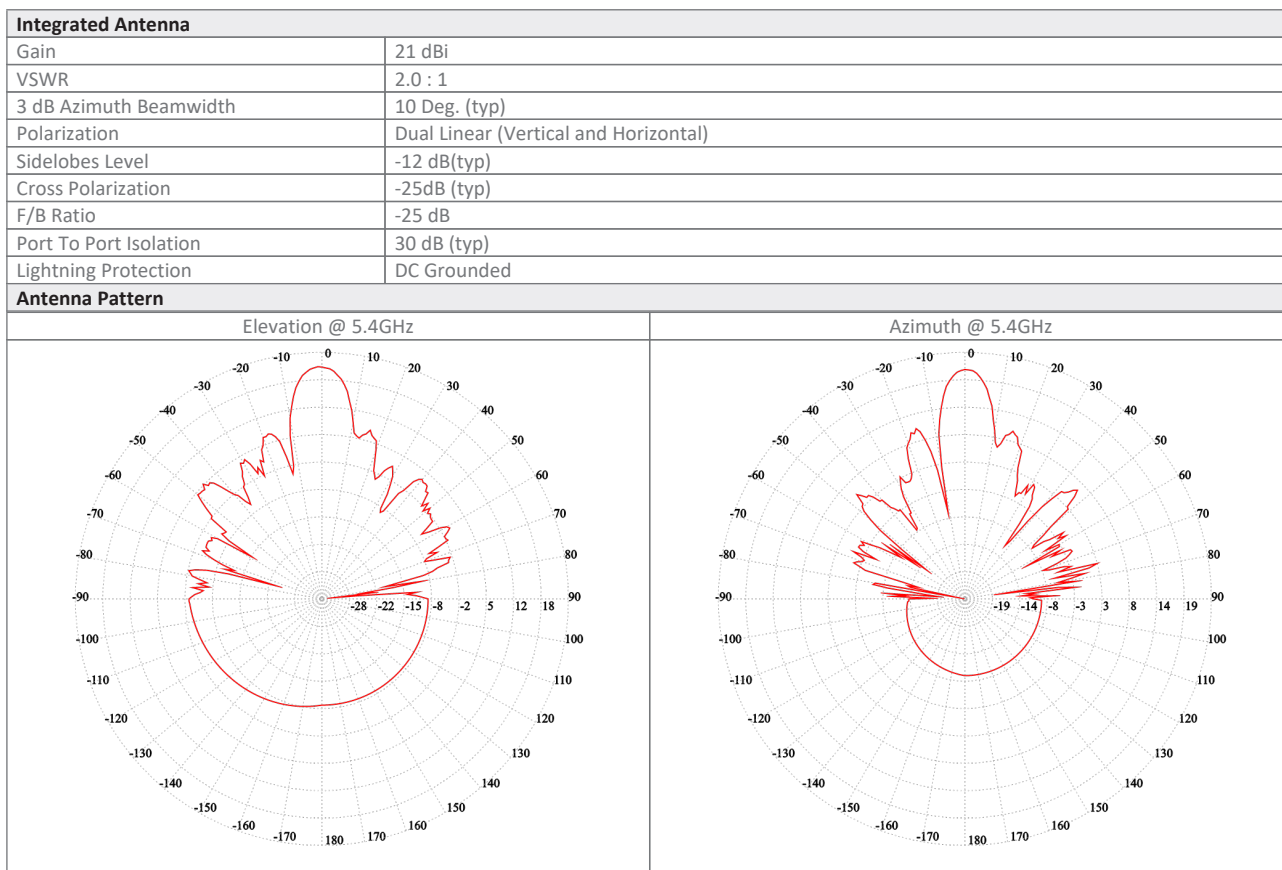SU PRO supports 4.9 to 6 GHz and complies with Universal & UBR regulations.
The unit includes an integrated 22dBi antenna.

Product Highlights

- Up to 50 Mbps net aggregated throughput, upgradable to 250Mbps
- Long range - Up to 40 km / 25 miles
- 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.

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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	50 Mbps net aggregate throughput; Upgradable to 250 Mbps with license key
Range	Up to 40 km / 25 miles *
Channel Bandwidth	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
Automatic Channel Selection	Supported upon power up
DFS	Not Supported
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
Support Indoor units	RADWIN PoE devices (9921-102X, included in the package)
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 20MHz [GHz]	CBW 40MHz [GHz]	CBW 80MHz [GHz]	Radio Compliance
5.4 GHz Universal (default)	5.465-5.730	5.455-5.740	5.455-5.760	Universal
4.9 GHz Universal	4.900-4.995	4.900-4.995	4.900-4.995	Universal
6.0 GHz Universal	5.690-6.060	5.680-6.070	5.680-6.090	Universal
5.9 GHz Universal	5.720-5.960	5.710-5.970	5.710-5.990	Universal
5.8 GHz Universal	5.725-5.850	5.725-5.850	5.725-5.850	Universal
5.1 GHz Universal	5.140-5.345	5.130-5.355	5.130-5.375	Universal
5.1 GHz UBR	5.125-5.880	5.125-5.880	5.125-5.880	Universal

Mechanical	
ODU Dimensions	32.5(w) x 32.5(h) x 6.4(d) cm
ODU Weight	2 kg / 4.41 lbs

Power	
Power Feeding	Power provided over ODU-IDU cable
Power Consumption	<13W

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)

Safety	
US/CAN (cTUVus)	UL 60950-1, UL 60950-22, CAN/CSA C22.2 60950-1, CAN/CSA C22.2 60950-22
CE/IEC	EN/IEC 60950-1, EN/IEC 60950-22

EMC	
FCC	47 CFR, Part15, Subpart B, Class B
ETSI	EN 301 489-1, EN 301 489-4, EN 301 489-17
CAN/CSA-CEI/IEC	AS/NZS, CISPR 32 2015 Class B

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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

Ordering Info
Part Number: RW-5H50-9P54
Description: RADWIN SU PRO 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

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