

## RADWIN SU-AIR 50 Series

Subscriber Unit - Data Sheet (RW5000/SU-Air/5650/F54/UNI/EMB)



RW-5650-9A50

### Product Description

RW-5650-9A50 is SU AIR, Connectorized 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, FCC/IC, MII & UBR regulations.

The unit includes an embedded antenna and connectors (2 x SMA) for the high gain slide-on TurboGain antenna. The connectors can be used for 3rd party external antenna.

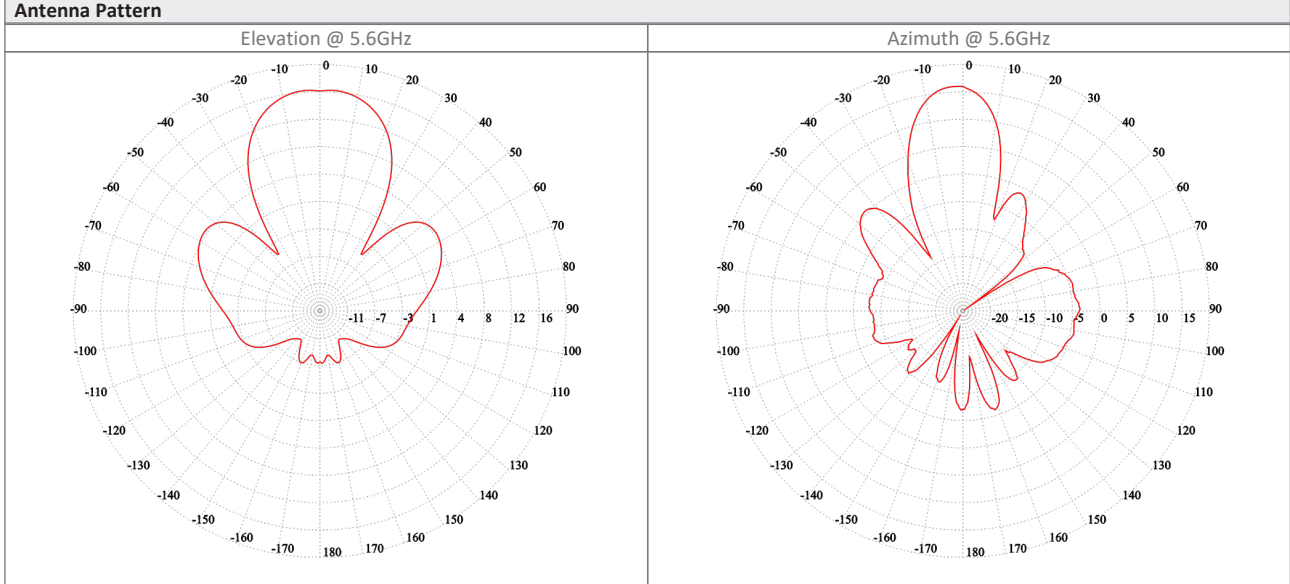
### Product Highlights

- Up to 50 Mbps net aggregated throughput, upgradable to 250Mbps
- Long range - Up to 40 km / 25 miles
- Best Effort Service level
- Multiple Antenna configuration: 16dBi embedded antenna, 22dBi antenna when using the TurboGain antenna, and 3rd party external antenna
- 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-66
- Simplified installation using a Smartphone app.

## Product Specifications:

Configuration					
Architecture	Outdoor Unit with an embedded antenna and connectors for external antenna (2 x SMA)				
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				
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				
DFS	Not Supported				
Diversity	Supported				
Max Tx Power	24 dBm				
Duplex Technology	TDD				
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6				
Encryption	AES 128				
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				
Support Indoor units	RADWIN PoE device (included in the package); pinout: (+) pins 4/5, (-) pins 7/8				
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; SNMP v1, SNMPv3; HTTP/HTTPS using web browser				
Supported Bands					
Band	CBW 10MHz [GHz]	CBW 20MHz [GHz]	CBW 40MHz [GHz]	CBW 80MHz [GHz]	Radio Compliance
5.4 GHz Universal (default)	5.470-5.725	5.465-5.730	5.455-5.740	5.455-5.760	Universal
5.8 GHz FCC/IC	5.730-5.845	5.730-5.845	5.730-5.845	5.730-5.845	FCC 47CFR Part 15.407; ISSED RSS-247
4.9 GHz Universal	4.900-4.995	4.900-4.995	4.900-4.995	4.900-4.995	Universal
6.0 GHz Universal	5.695-6.055	5.690-6.060	5.680-6.070	5.680-6.090	Universal
5.9 GHz Universal	5.725-5.955	5.720-5.960	5.710-5.970	5.710-5.990	Universal
5.9 GHz Universal	5.725-5.850	5.725-5.850	5.725-5.850	5.725-5.850	Universal
5.1 GHz Universal	5.145-5.340	5.140-5.345	5.130-5.355	5.130-5.375	Universal
5.8 GHz MII	5.725-5.850	5.725-5.850	5.725-5.850	5.725-5.850	CMIIT RTA
5.1 GHz UBR	5.125-5.880	5.125-5.880	5.125-5.880	5.125-5.880	Universal
Mechanical					
ODU Dimensions	18.2(w) x 18.2(h) x 6.0(d) cm				
ODU Weight	0.5 kg / 1.10 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, IP66				
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	CISPR 22-2010 Class B				

Integrated Antenna	
Gain	16 dBi
VSWR	1.7:1
3 dB Azimuth Beamwidth	17 Deg. (typ)
Polarization	Dual Linear (Vertical and Horizontal)
Sidelobes Level	-12 dB(typ)
Cross Polarization	-30dB (typ)
F/B Ratio	-25 dB
Port To Port Isolation	35 dB (typ)
Lightning Protection	DC Grounded



**Ordering Info**

Part Number: RW-5650-9A50

Description: RADWIN SU-AIR 50 ODU, with an embedded antenna and connectorized for external antenna (2 x SMA), supporting multi frequency bands at 5.x GHz, factory default 5.4 GHz Universal.

Datasheet information can be changed by manufacturer without prior notice