RADWIN Subscriber Units, SU AIR Model

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



RW-5650-2A54

Product Description

RW-5650-2A54 is SU AIR, Connectorized subscriber unit that delivers up to 50 Mbps net aggregate throughput and supports Best-Effort service level.

SU AIR supports 5.4 to 5.8 GHz and complies with ETSI 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 v	vith an embedded	l antenna and con	nectos for external antenna (2 x SMA)		
PoE to ODU Interface				r 10/100BaseT and 75m for 1000BaseT		
Radio	'					
Max Capacity	50 Mbps net ag	gregate through	out; Upgradable to	o 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/16QA	M/64QAM/256Q	AM)		
Adaptive Modulation & Coding	Supported	, . ,	, ,	. ,		
DFS	Supported (ETSI)					
Diversity	Supported					
Max Tx Power	24 dBm per chain; max EIRP 30 dBm (for the default band)					
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					
RADIUS Authorization	Supported					
RADIUS User authentication	Supported					
Syslog	Supported					
Supported Bands	Supported					
Band	CBW 20MHz	CBW 40MHz	CBW 80MHz	Radio Compliance		
Buria	[GHz]	[GHz]	[GHz]	nadio compilance		
5.4 GHz ETSI (default)	5.470-5.710	5.490-5.690	5.490-5.650	ETSI EN 301 893		
5.8 GHz ETSI	5.735-5.865	-	-	ETSI EN 302 502		
Mechanical	5.755 5.005 E131 EN 302 302					
ODU Dimensions	18.2(w) x 18.2(h) x 6.0(d) cm					
ODU Weight	0.5 kg / 1.10 lbs					
Power	0.5 Kg / 1.10 lb	0.7 v8 \ T.TO ID2				
Power Feeding						
1 Ower reeding	Note: DC POE RW-9921-2059 is required in case of external antenna and floating ground DC feed					
Power Consumption	Note: DC POE RW-9921-2059 is required in case of external afterina and floating ground DC feed					
Environmental	11344					
Operating Temperatures	-35°C to 60°C / -31°F to 140°F					
Humidity	100% condensing, IP66					
Safety	1 20070 CONDENS	116, 11 00				
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	_ LIV/ILC 00330	L, LIV/ILC 00330-2				
FCC	47 CFR, Part15, Subpart B, Class B					
ETSI	EN 301 489-1, EN 301 489-4, EN 301 489-17					
	-	·	201 402-1/			
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				
Antenna Pattern					
Elevation @ 5.60	GHz	Azimuth @ 5.6GHz			
-50 -60 -70 -80 -90 -110 -120 -130 -140 -150 -160 -170 -180 -170	100 110 120 130 140	-30 -10 0 10 20 30 40 -40 -50 -50 -60 -70 -70 -70 -80 -100 -110 -120 -130 -140 -150 -160 -170 180 170 160 150			

Ordering Info

Part Number: RW-5650-2A54

Description: RADWIN SU AIR 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 ETSI.

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

Datasheet information can be changed by manufacturer without prior notice

