RADWIN SU-PRO 250 Series

Subscriber Unit - Data Sheet (RW5000/SU-Pro/5601/F54/IC/EMB)



RW-5601-1P54

Product Description

RW-5601-1P54 is SU PRO, Connectorized subscriber unit that delivers up to 250 Mbps net aggregate throughput and supports SLA (CIR) or Best-Effort service level.

SU PRO supports 5.2 to 5.8 GHz and complies with IC & FCC/IC 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 250 Mbps net aggregated throughput
- Long range Up to 40 km / 25 miles
- Guaranteed Service Level Agreement based on CIR or Best Effort Service level
- Multiple Antenna configuration: 16dBi embedded antenna, 22dBi antenna when using the TurboGain antenna, and 3rd party external antenna (based on a future software upgrade)
- 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 connectorized 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	250 Mbps net aggregate throughput					
Range	Up to 40 km / 2		1000			
Channel Bandwidth	Configurable: 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	Supported (IC)					
Diversity	Supported					
Max Tx Power	24 dBm; max EIRP 29 dBm (for the default band)					
Duplex Technology	TDD					
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6					
Encryption	AES 128; FIPS 197					
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	1,		,,			
Band	CBW 10MHz	CBW 20MHz	CBW 40MHz	CBW 80MHz	Radio Compliance	
	[GHz]	[GHz]	[GHz]	[GHz]		
5.485-5.715 GHz IC (default)	-	5.475-5.715	5.475-5.720	5.485-5.600	ISED RSS-247	
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; ISED RSS-247	
5.255-5.345 GHz IC	-	5.250-5.345	5.250-5.345	5.250-5.345	FCC 47CFR Part 15.407	
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	<12W					
Environmental	·					
Operating Temperatures	-35°C to 60°C / -31°F to 140°F					
Humidity	100% condensing, IP66					
Safety		<u>.</u>				
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 300 386, EN 301 489-1, EN 301 489-4					
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 @ 5.6	GHz	Azimuth @ 5.6GHz			
-50 -60 -70 -80 -90 -110 -120 -130 -140 -150 -160 -170 180 150	110 120 130 140	-100 -100 -100 -100 -100 -100 -100 -100			

Ordering Info

Part Number: RW-5601-1P54

 $\textbf{Description:} \ \text{RADWIN SU-PRO 250 ODU, with an embedded antenna and connectorized for external antenna (2 x SMA), supporting multifrequency bands at GHz, factory default .}$

Datasheet information can be changed by manufacturer without prior notice

