RADWIN Subscriber Units, SU ECO Model

Subscriber Unit - Data Sheet (RW5000/SU-ECO/5D02/F50/WW/DISH)

RW-5D02-UA50

Product Description

RW-5D02-UA50 is SU ECO Model, subscriber unit that delivers up to 200 Mbps net aggregate throughput and supports Best-Effort service level.
SU ECO supports 4.9 to 6 GHz and complies with ETSI, UBR, Universal regulations.
The unit includes an integrated antenna.

Product Highlights

- Up to 200 Mbps net aggregated throughput
- Long range - Up to 40 km / 25 miles
- Best Effort Service level
- Short and constant latency
- Advanced MIMO, OFDM and Diversity technologies
- Robust and reliable operation in harsh environmental conditions including obstructed line-of-sight scenarios
- Ease of operation and maintenance
- Uniform Global Part Numbering, receiving the regulatory specifications from the base station
- 4 units package shipment

RADWIN

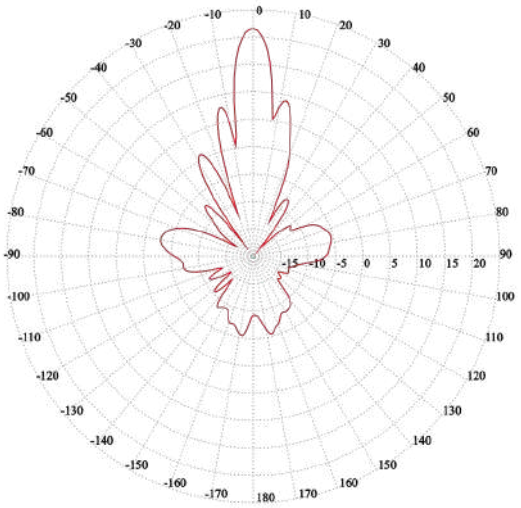
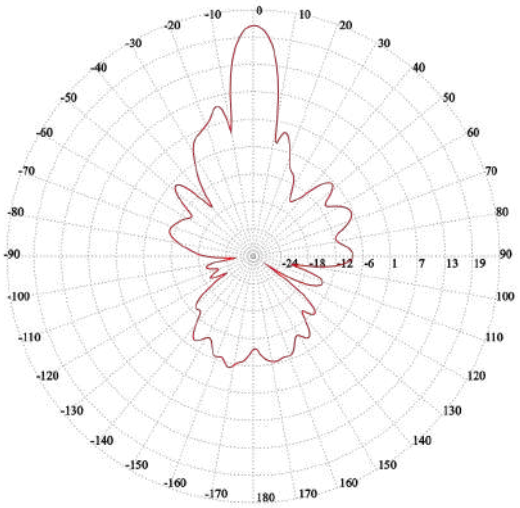
Product Specifications:

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	200 Mbps net aggregate throughput				
Channel Bandwidth	Configurable: 10, 20, 40, 80 MHz (for the default band)				
Modulation	MIMO-OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)				
Adaptive Modulation & Coding	Supported				
DFS	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; AES 256				
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 and v3; HTTP using web browser				
***Supported Bands**					
Band	**CBW 10MHz [GHz]**	**CBW 20MHz [GHz]**	**CBW 40MHz [GHz]**	**CBW 80MHz [GHz]**	**Radio Compliance**
4.9 GHz Universal	4.895-6.005	4.890-6.010	4.880-6.020	4.860-6.040	Universal
4.9 GHz Universal	4.900-4.995	4.900-4.995	4.900-4.995	4.900-4.995	Universal
5.1 GHz UBR	5.125-5.880	5.125-5.880	5.125-5.880	5.125-5.880	Universal
5.1 GHz Universal	5.145-5.340	5.140-5.345	5.130-5.355	5.130-5.375	Universal
5.4 GHz Australia	-	5.470-5.710	5.490-5.690	5.490-5.650	ETSI EN 301 893
5.4 GHz ETSI	-	5.470-5.710	5.490-5.690	5.490-5.650	ETSI EN 301 893
5.4 GHz Kazakhstan	-	5.470-5.650	5.470-5.650	5.470-5.650	ETSI EN 301 893
5.4 GHz Universal (default)	5.470-5.725	5.465-5.730	5.455-5.740	5.455-5.760	Universal
5.7 GHz ETSI/GER	-	5.735-5.865	5.735-5.865	5.735-5.865	ETSI EN 302 502; ECC Recommendation (06)04
5.7 GHz IL	-	5.735-5.865	5.735-5.865	5.735-5.865	ETSI EN 302 502 with adaptation per Israeli Wireless Telegraph Regulations
5.7 GHz Nigeria	5.735-5.865	5.735-5.865	5.710-5.890	5.690-5.910	ETSI EN 302 502
5.8 GHz Australia	-	5.735-5.865	5.725-5.875	5.725-5.875	ETSI EN 302 502; ECC Recommendation (06)04
5.8 GHz ETSI	-	5.735-5.865	-	-	ETSI EN 302 502
5.8 GHz Kazakhstan	-	5.725-5.875	5.725-5.875	5.725-5.875	ETSI EN 302 502
5.8 GHz MII	5.725-5.850	5.725-5.850	5.725-5.850	5.725-5.850	CMIIT RTA
5.8 GHz Universal	5.725-5.850	5.725-5.850	5.725-5.850	5.725-5.850	Universal
5.9 GHz Universal	5.725-5.955	5.720-5.960	5.710-5.970	5.710-5.990	Universal
6.0 GHz Universal	5.695-6.055	5.690-6.060	5.680-6.070	5.680-6.090	Universal
Mechanical					
ODU Dimensions	46.4 (Dia) x 25.0 (d) cm				
ODU Weight	1.6 kg / 3.53 lbs				
Mounting Kit	Included				
Power					
Power Feeding	Power provided over ODU-IDU cable				
Power Consumption	<9W				
Network Device					
AC POE	AC POE: 24V0.5A (included)**				
Package Content					
Package	4 sets of Radio unit with parabolic dish antenna, pole mounting kit, IP56 gland for POE port, 24V POE unit and AC Power cable				
Environmental					
Operating Temperatures	-20°C to 60°C / -4°F to 140°F				
Humidity	5%-95% RH Non-condensing, IP56				
MTBF	4,075,000 hours (Telcordia SR332 @25°C)				
Wind Resistance operational	200Km/h				
Safety					
US/CAN (cTUVus)	-				
CE/IEC	EN/IEC 62368-1, EN/IEC 60950-22				
EMC					
CE	EN 301 489-1, EN 301 489-4, EN 301 489-17				
FCC	-				
ETSI	-				
Canada	-				

RADWIN

Integrated Antenna	
Gain	23 dBi
Detailed Gain	
VSWR	<3.0 : 1
3 dB Azimuth Beamwidth	8 Deg. (Typ)
3 dB Elevation Beamwidth	10 Deg. (Typ)
Polarization	Dual (Vertical and Horizontal)
Sidelobes Level	>=12dBc
Cross Polarization	
F/B Ratio	-25 dB
Port To Port Isolation	20 dB (typ)
Lightning Protection	Reflector is DC grounded

Antenna Pattern

Elevation @ 5.55GHz	Azimuth @ 5.55GHz
	

Ordering Info

Part Number: RW-5D02-UA50

Description: RADWIN SU ECO ODU, with an integrated antenna, supporting multi frequency bands at 5.x GHz.

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

**Input voltage above 24V will damage the product

Datasheet information can be changed by manufacturer without prior notice

Corporate Headquarters, T. +972.3.766.2900, E. sales@radwin.com, www.radwin.com

The RADWIN name is a registered trademark of RADWIN Ltd. © All rights reserved, March 2025