

# RADWIN

## SU PRO Integrated PtMP Subscriber Unit

### Data Sheet



### Product Overview

SU PRO Integrated is a subscriber unit with an integrated antenna, providing up to 500Mbps operating in the 5GHz band.

SU PRO is ideal for business customers requiring SLA connectivity via Committed Information Rate (CIR) service level. SU PRO is interoperable with all RADWIN Sub 6GHz base stations but provides SLA when operating with base stations that support CIR. Four level QoS is provided in all cases.

Two SU PRO can also be used as a Point-to-Point (PtP) link. When SU PRO connects as a remote unit to a RADWIN 2000 Alpha 500Mbps Point-to-Point radio, network TDD synchronization is provided. SU PRO provides impressive packet switching power that guarantees capacity in short packets traffic.

Highly durable, SU PRO complies with the IP 67 standard to reduce truck roll costs.

### Product Highlights

- » 250Mbps or 500Mbps Subscriber unit
- » 22dBi Integrated antenna
- » 4.9-6.0 GHz
- » Up to 40 km / 25 miles
- » Committed Information Rate (CIR) & best-effort service level
- » Automated installation via mobile app
- » Operable also as PtP
- » Interoperable with all RADWIN Base stations
- » Highly durable - IP 67

## Product specifications:

### Configuration

Architecture	Outdoor Unit with integrated antenna
Wireless topology	PtMP Subscriber unit, PtP unit
POE and ODU interfaces	Outdoor CAT-5e; Maximum cable length: 75m for 1000BaseT

### Radio

Max capacity	500 Mbps net aggregate throughput (up to 250 Mbps per direction) 250 Mbps net aggregate throughput Upgradable to 500 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	OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)
Error correction	FEC k = 1/2, 2/3, 3/4, 5/6
Adaptive modulation and Coding	Supported
Duplex technology	TDD
DFS	Supported
Antenna modes	MIMO 2x2 , diversity , adaptive MIMO/diversity
Dynamic Bandwidth management	Committed Information Rate (CIR) and Best Effort service level
Nomadic mode of operation	Supported
Max TX power	26 dBm
Encryption	AES128
Uplink/Downlink allocation	Configurable: Symmetric or Asymmetric

### Networking

Sub convergence layer	Layer2, 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 (for PtMP mode)
Option 82	Supported (for PtMP mode)
DHCP filtering	Supported (for PtMP mode)
IGMP snooping	Supported (for PtMP mode)
PPPoE filtering	Supported (for PtMP mode)
RADIUS Authorization	Supported (for PtMP mode)
RADIUS User authentication	Supported
Syslog	Supported

## Physical Specification:

Mechanical	
Dimension	32.5(w) x 32.5(h) x 6.4(d) cm / 12.8" (w) x 12.8" (h) x 2.5" (d)
Weight	2 kg/4.41lbs
Power	
Power consumption	<13W
Power feeding	Power provided over ODU-IDU cable
Environmental	
Operating temperature	-35°C to 60°C / -31°F to 140°F
Humidity	100% condensing
Enclosure protection	IP67 per EN/IEC 60529, NEMA Type 4 Enclosure

## Antenna:

Integrated Antenna	
Gain	22 dBi
VSWR	2.0 : 1
3 dB Azimuth beamwidth	10° (typical)
3 dB Elevation Beamwidth	10° (typical)
Polarization	Dual Linear (Vertical and Horizontal)
Sidelobes level	-12 dB(typical)
Cross polarization	-25 dB (typical)
F/B Ratio	25 dB
Port To Port isolation	30 dB (typical)
Lightning protection	DC Grounded

## Regulatory compliance:

Radio	
USA	FCC 47CFR Part 15.407
Canada	ISED RSS-247
EU	ESTI EN 301 893; ETSI EN 301 502
Safety	
CE/IEC	EN/IEC 62368-1, EN/IEC 60950-22
USA/Canada (cTUVus)	UL/CSA-C22.2 62368-1, UL/CSA-C22.2 60950-22
EMC	
EU	ETSI EN 301 489-1, ETSI EN 301 489-4, ETSI 301 489-17
USA	FCC 47CFR Part 15 Subpart B, Class B
Canada/CSA – CEI/IEC	ICES-003, CISPR 32 Class B
AS/NZS	CISPR 32 Class B

## Supported Bands:

Band	Occupied Bandwidth Support	EIRP[dBm]	Radio Compliance
5.8 GHz FCC/ISED	5.730-5.845 GHz	36	FCC 47CFR Part 15.407, ISED RSS-247
5.4 GHz FCC/ISED	5.480-5.715 GHz	30	FCC 47CFR Part 15.407, ISED RSS-247
5.2 GHz FCC	5.250-5.340 GHz	30	FCC 47CFR Part 15.407,
5.1 GHz FCC	5.170-5.845 GHz	36	FCC 47CFR Part 15.407
4.9 GHz Universal	4.900-4.995 GHz	44	Universal
5.1 GHz Universal	5.130-5.375 GHz	44	Universal
5.4 GHz Universal	5.455-5.760 GHz	44	Universal
5.9 GHz Universal	5.725-5.850 GHz	45	Universal
6.0 GHz Universal	5.680-6.090 GHz	50	Universal
5.1 GHz Unified Universal	5.125-5.880 GHz	50	Universal
5.4 GHz ETSI	5.470-5.710 GHz	30	EN 301 893
5.8 GHz ETSI	5.735-5.865 GHz	36	EN 302 502

## Product ordering:

### 500Mbps Subscriber Units

Part number	Product name	Regulation	Default Band
RW-5HC5-0P58	RW5000/SU-Pro/5HC5/F58/FCC/INT	FCC	5.8 GHz
RW-5HC5-1P54	RW5000/SU-Pro/5HC5/F54/IC/INT	IC/ISED	5.4 GHz
RW-5HC5-2P54	RW5000/SU-Pro/5HC5/F54/ETSI/INT	ETSI	5.4 GHz
RW-5HC5-4P58	RW5000/SU-Pro/5HC5/F58/WPC/INT	WPC	5.8 GHz
RW-5HC5-8P58	RW5000/SU-Pro/5HC5/F58/MII/INT	MII	5.8 GHz
RW-5HC5-9P54	RW5000/SU-Pro/5HC5/F54/UNI/INT	Universal	5.4 GHz
RW-5HC5-NP58	RW5000/SU-Pro/5HC5/F58/Nigeria/INT	Nigeria	5.8 GHz

### 250Mbps Subscriber Units

Part number	Product name	Regulation	Default Band
RW-5H01-0P58	RW5000/SU-Pro/5H01/F58/FCC/INT	FCC	5.8 GHz
RW-5H01-1P54	RW5000/SU-Pro/5H01/F54/IC/INT	IC/ISED	5.4 GHz
RW-5H01-2P54	RW5000/SU-Pro/5H01/F54/ETSI/INT	ETSI	5.4 GHz
RW-5H01-4P58	RW5000/SU-Pro/5H01/F58/WPC/INT	WPC	5.8 GHz
RW-5H01-8P58	RW5000/SU-Pro/5H01/F58/MII/INT	MII	5.8 GHz
RW-5H01-9P54	RW5000/SU-Pro/5H01/F54/UNI/INT	Universal	5.4 GHz
RW-5H01-NP58	RW5000/SU-Pro/5H01/F58/Nigeria/INT	Nigeria	5.8 GHz

### PoE units

Part number	Product name	Part description
RW-9921-1039	POE/DC/GBE/24-57	DC input 24VDC -57VDC

## Package contents:

Radio unit

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Mounting Kit

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IP67 Cable gland

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AC PoE RW-9921-102X with country specific power cable according to order

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Datasheet information can be changed by manufacturer without prior notice