RADWIN

5000L Integrated PtMP Base Station

Data Sheet

Product Overview

5000L Integrated unit delivers up to 250Mbps for 16 end-users over the 4.9 to 6 GHz band and comes with a 90° sector antenna. The unit supports collocation of RADWIN radios via a built-in GPS.

Competitively priced, RADWIN 5000L offers a compact, low visual impact base station that is designed for low-density areas with a few end users.

Using RADWIN's unique Air-Interface, the unit assures end user SLA via CIR (Committed Information Rate). 5000L is ideal for video surveillance connectivity, remote automation and IOT connectivity, outdoor Wi-Fi backhaul and many other applications

Product Highlights

- » Up to 250Mbps net aggregated throughput
- » Up to 16 end users
- » 12dBi integrated antenna
- » Service levels: CIR or Best effort
- » Built-in GPS for TDD synchronization
- » Up to 40 km / 25 miles
- » Highly durable – IP67
- » Robust and reliable operation
- » Low visual impact
- » 4.9 to 6GHz

Product specifications:

Configuration	
Architecture	Outdoor Unit with an integrated antenna and built in GPS receiver
Wireless topology	PtMP base station
Data interfaces	10/100/1000 Mbps RJ45 PoE,
POE and ODU interfaces	Outdoor CAT-5e; Maximum cable length: 75m for 1000BaseT
Radio	
Max capacity	250 Mbps net aggregate throughput
Maximum Subscriber Units	Up to 16
Range	Up to 40 km / 25 miles*
Frequency Range	4.900 GHz – 6.070 GHz*
Channel bandwidth	Configurable: 10, 20, 40 MHz *
Dynamic Channel bandwidth selection	20/40 MHz
Modulation	MIMO-OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)
Error correction	FEC k = 1/2, 2/3, 3/4, 5/6
Adaptive modulation and Coding	Supported
Smart Bandwidth Management (DBA)	Supported
DFS	Supported *
Duplex technology	TDD
Diversity	Supported
Antenna modes	MIMO 2x2, diversity, adaptive MIMO/diversity
Max TX power	26 dBm *
Encryption	AES128
TDD Intra site synchronization	Supported via built-in GPS receiver
TDD Inter site synchronization	Supported via built-in GPS receiver
Uplink/Downlink allocation	Configurable: Symmetric or Asymmetric
Networking	
Sub convergence layer	Layer 2, Bridging learning of 5K MAC addresses
QoS	Packet classification to 4 priority queues according to 802.1P or Diffserv
VLAN support	802.1Q, QinQ, 4094 VLANs
MTU size	Up to 9216 bytes
ODU management	IPv4/IPv6 dual-stack; SNMPv1, SNMPv3; HTTP/HTTPS using web browser
DCHP option 82	Supported
RADIUS authorization	Supported
RADIUS user authentication	Supported
Syslog	Supported

*   May be limited by regulation - please refer to the technical datasheet for a specific part number

Physical Specification:

Mechanical	
Dimension	32.5 (w) x 32.5.0(h) x 6.4 (d) cm / 12.8" (w) x 12.8" (h) x 2.5" (d)
Weight	2kg/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	12 dBi
VSWR	2.0: 1
3 dB Azimuth beamwidth	90 ° (typical)
Polarization	Dual Linear (Vertical and Horizontal)
Sidelobes level	-25 dB (typical)
Cross polarization	-27 dB (typical)
F/B Ratio	30 dB
Port To Port isolation	40 dB (typical)
Lightning protection	DC Grounded

Regulatory compliance:

Radio	
USA	FCC 47CFR Part 15.407
Canada	ISED RSS-247
EU	ETSI EN 301 893; ETSI EN 302 502
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

Product ordering:

Radio units			
Part number	Product name	Regulation	Default band
RW-5LB5-2154	RW5000/HBS-Pro/5LB5/F54/ETSI/INT	ETSI	5.4 GHz
RW-5LB5-4158	RW5000/HBS-Pro/5LB5/F58/WPC/INT	WPC	5.8 GHz
RW-5LB5-8158	RW5000/HBS-Pro/5LB5/F58/MII/INT	MII	5.8 GHz
RW-5LB5-9154	RW5000/HBS-Pro/5LB5/F54/UNI/INT	UNIVERSAL	5.4 GHz

PoE units		
Part number	Product name	Product description
RW-9921-2059	POE/DC/GBE/ET/10-60	DC input 10V – 60V
RW-9921-400X	POE/AC/2.5/GBE	AC input 100VAC – 240VAC See POE datasheet for country specific power plug

PoE switch units		
Part number	Product name	Product description
RW-7401-6006	IDU-S/HP	Managed indoor switch, 6x PoE ports, SFP/SFP+ interfaces

Package contents:

Radio unit
Mounting Kit
IP67 Cable glands

Datasheet information can be changed by manufacturer without prior notice