



RADWIN 5000 PtMP

Ride the RADWIN 5000 PtMP Wireless Highway

RADWIN 5000 is a Point-to-Multipoint (PtMP) solution with a unique air interface that ensures robust performance in harsh spectrum conditions.

This cost-effective solution delivers up to 250 Mbps and is greatly suitable for last mile enterprise and residential connectivity in rural and low-density areas when budget is limited.

RADWIN 5000 Highlights

- » OFDM, MIMO 2x2 / Diversity enables real nLOS deployment
- » Multi-Band Capabilities - All in a Single Unit
- » Fixed and Nomadic capabilities
- » Full Span of Asymmetric Traffic
- » Coexists with RADWIN's PtP and PtMP solutions

RADWIN 5000 Base Stations

- » Up to 250 Mbps per base station sector
- » Guaranteed SLA/Best-Effort
- » Long range – 40 Km / 25 miles
- » Low and constant latency
- » IP67 certified

RADWIN 5000 Subscriber Units

- » High-capacity SUs – up to 250 Mbps
- » Pay-as-you-grow capacity
- » Various antenna configurations
- » Small form factor for low visual impact
- » Innovative operational simplicity



RADWIN 5000 Applications

CARRIERS & ISPS

RADWIN 5000 PtMP is an excellent revenue generator for carriers and ISPs that are looking to deploy last mile enterprise connectivity and deliver high-capacity broadband access to end users.

Carriers can leverage RADWIN 5000 PtMP capabilities and nLOS outstanding performance to backhaul wireless and landline access systems such as Wi-Fi hot spots.



GOVERNMENT & ENTERPRISE NETWORKS

RADWIN 5000 PtMP offers exclusive wireless broadband infrastructure for government and enterprise networks to dramatically reduce their total cost of ownership when implementing the following applications:

- » Connectivity of high resolution video surveillance
- » Wide range inter-office connectivity
- » Mission critical broadband applications





RADWIN 5000 Base Stations

RADWIN 5000 Base Station is a high capacity OFDM / MIMO 2x2 outdoor Base Station unit that can cover a single sector in MIMO mode, using dual polarized antenna, or dual sectors when working with two single-polarized antennas. It enables TDD synchronization of all collocated sectors within a site and between base stations located in different sites. This synchronization prevents mutual interference between closely situated radio units and saves tower space and spectrum.

RADWIN 5000 Base Stations portfolio supports fixed and nomadic applications, providing varying levels of capacity: 50, 100 and 250 Mbps.

Two versions of RADWIN 5000 Base Stations are available:

- » RADWIN 5000 BS-AIR (5.X GHz) supporting Best effort service
- » RADWIN 5000 BS-PRO (5.x GHz /3.x GHz) also enables to offer SLA for bandwidth-demanding applications based on Committed Information Rate (CIR)

RADWIN 5000 Subscriber Units

RADWIN's powerful Subscriber Units (SUs) deliver fiber-like connectivity with high Packet-Per-Second (PPS) processing power to maintain highest capacity even in small packet applications.

Designed for low visual impact, RADWIN's ruggedized SUs assure long lasting operation even in the harshest conditions. Innovative operational simplicity concepts and cutting-edge technology streamline operations and maintenance procedures.

High-capacity subscriber units (4.9 - 5.9 GHz)

- » Pay-as-you-grow 25 up to 250Mbps
- » Multiple antenna configurations
- » High durability – IP 66/IP67 enclosure
- » Compatible with all RADWIN base stations
- » Available Models:
 - › SU-AIR: Designed for residential subscribers
 - › SU-PRO: Offers SLA for enterprise and bandwidth-demanding applications, based on CIR



High-capacity subscriber units (3.3 - 3.8 GHz / 3.65 GHz)

- » Pay-as-you-grow 25 up to 100Mbps
- » Available as connectorized unit or with integrated antenna
- » High durability – IP 67 enclosure
- » Available Models:
 - › HSU-R: Designed for residential subscribers
 - › HSU: Offers SLA for enterprise and bandwidth-demanding applications, based on CIR



Innovative operational simplicity

Smartphone installation application

RADWIN SU series includes a smartphone app designed to speed up and simplify installation.

WINTouch APP

Enables automated installation, alignment & commissioning

Simple, fast and precise installation



Android & iOS

Multiple antenna configurations

RADWIN SU series includes an embedded antenna and is compatible with RADWIN's new and innovative slide-on antenna to achieve greater range. An option for third-party external antennas is also available.

TurboGain™ antenna

Slide-on antenna

Doubles the service range



Product specifications (See individual Product Data Sheets for detailed spec.)

Maximum Net Aggregate Capacity

	Base station	High-Capacity Subscriber Units
4.9 - 5.9 GHz	250 Mbps	SU <i>AIR</i> – Up 100Mbps, SU <i>PRO</i> – Up to 250Mbps
3.3 - 3.8 GHz, 3.65 GHz		10, 25, 50 Mbps, upgradable to 100Mbps

Antenna Configurations

4.9 - 5.9 GHz	11dBi, 13dBi, Connectorized	16dBi, 22dBi, Connectorized
3.3 - 3.8 GHz, 3.65 GHz	Connectorized	13dBi, 20dBi, Connectorized

Radio

Number of SUs / HBS	Up to 32 SUs simultaneously
Range	Up to 40 km / 25 miles
Frequency Bands	Multiband radio supporting 4.9 - 5.9 GHz or 3.3-3.8 / 3.65 GHz /2.3-2.5 GHz
Channel Bandwidth	5.x GHz- Configurable: 10, 20, 40 MHz, 3.x GHz: 5, 7, 10, 14, 20, 40MHz
Radio Access scheme	OFDM, Auto MIMO 2x2 or Diversity per SU
Adaptive Modulation & Coding	BPSK/QPSK/QAM16/QAM64
SLA management	CIR, MIR, Best-Effort
End to End Latency	Typical: 3.5msec
Duplex Technology	TDD, Configurable Uplink / Downlink ratio
Max Tx Power	HBS : 25dBm @ 5.x GHz, 25dBm@ 3.x GHz (in all modulation schemes) HSU: 25dBm, SU (embedded) 24dBm, SU (integrated) 26dBm
DFS (FCC & ETSI)	Supported
Spectrum Viewer	Supported at HBS & SU/ HSU
TDD Synchronization	Inter & Intra site synchronization, using GSU
Encryption	AES 128

Interfaces

Ethernet Interface	HBS: Single port for Data & management, 10/100/1000BaseT, SU: 10/100/1000BaseT
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Networking

Sub convergence layer	Layer 2
QoS	Packet classification to 4 queues according to 802.1p and Diffserv, Strict Priority, TTL
VLAN	802.1Q, QinQ, 4094 VLANs

Management

Management Application	HBS: RADWIN Manager & Web based management, SU: Smartphone App.
Protocol	SNMPv1, SNMPv3, Telnet, HTTP, IPv4 & IPv6, RADIUS for AAA Server
NMS Application	RADWIN NMS (WINManage) or integration with 3rd party NMS system via standard MIBs

Power

Power Feeding	Provided over PoE interface
Power Consumption	HBS < 25W, SU (embedded) & HSU < 12W, SU (integrated) < 9W

Environmental

Operating Temperatures	-35°C to 60°C / -31°F to 140°F
Humidity	100% condensing HBS, HSU & SU (Integrated): IP67 SU (embedded): IP66

Radio Regulations

	FCC, IC, ETSI, WPC, MII
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Safety

	FCC/IC (cTUVus), ETSI
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EMC	FCC, ETSI, CAN/CSA, AS/NZS
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