

RADWIN 2000 Alpha PRO

Point-to-Point & Point-to-MultiPoint Subscriber Unit Series 500 Mbps Carrier Class Solution

Evolving from the RADWIN 2000 Alpha and SU PRO, the RADWIN Alpha PRO redefines wireless connectivity by seamlessly integrating PtP and SU capabilities into a singular, high-performance solution. Designed for today's networks, it simplifies setup and allows for easy switching between roles. Using a uniform part number and providing the option to scale from 50Mbps to 500Mbps via a software upgrade, the Alpha PRO seamlessly grows according to your network needs.

Leveraging RADWIN's distinct, field-tested air-interface, the Alpha PRO ensures reliable performance in unlicensed spectrums at a market-competitive price, making it the ideal choice for high-speed wireless access and durable backhaul for applications like video surveillance.

Alpha PRO Highlights

- » 50Mbps or 500Mbps aggregated PtP or SU radio unit
- » Integrated or connectorized
- » 4.9-6.0 GHz
- » Up to 120 km / 75 miles
- » Built-in GPS¹
- » Dying gasp¹
- » AES 128/ 256²
- » Dynamic channel bandwidth
- » Highly durable - IP 67

Applications

- » Wireless enterprise access
- » Video surveillance backhaul
- » Leased line replacements
- » Building to building connectivity

RADWIN Alpha PRO Benefits:

- » High capacity guaranteed for short packets (350K PPS).
- » Built-in GPS supports multiple radio co-location, reducing external equipment costs and eliminating a single point of failure for TDD synchronization.
- » The dying gasp feature sends alerts on local power failures, minimizing unnecessary maintenance.
- » Maintains reliable links in congested spectrums and challenging conditions.
- » Offers unmatched performance with the lowest total cost of ownership (TCO)
- » Adheres to various location-based regulations via GPS.



RADWIN 2000 Alpha PRO
Integrated

RADWIN 2000 Alpha PRO
Connectorized

PoE in the box

Note 1: Applicable for 4.9-6.0 GHz only

Note 2: AES 256 applicable only for PtP or PtMP with 5000L

Product Specifications

EU / Int., FCC	
Architecture	Outdoor connectorized or outdoor with integrated antenna
PoE to ODU Interface	Outdoor CAT-5e; Maximum cable length: 100m for 10/100BaseT and 75m for 1000BaseT
Radio	
Capacity	50Mbps net aggregate throughput. Upgradeable by license key up to 5000Mbps.
Range	120 Km for PtP. 40 Km for PtMP SU.
Frequency Band	4.9 – 6.0GHz
Channel Bandwidth	Configurable: 10, 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
Automatic Channel Selection	Supported upon power up
Regulation	FCC, ETSI, Canada, MII, ACMA
Encryption	PtP mode: AES 256 SU mode: AES 128 (AES 256 by license, if BS supports AES 256)
Uplink / Downlink Allocation	Configurable: Symmetric or Asymmetric
QoS	Packet classification to 4 priority queues according to 802.1P or Diffserv
VLAN Support	802.1Q, QinQ, 4094 VLANs
TDD Intra/Inter Site Synchronization	Supported via built-in GPS receiver
ODU Management	IPv4/IPv6 dual stack; DHCP client for SU (IPv4 only); SNMPv1, SNMPv3; HTTP/HTTPS using web browser;
SU mode supported capabilities	Non PPPoE filtering, DHCP Filter, IGMP snooping, Nomadic, DHCP Option 82
Dying gasp	**Supported (PoE voltage must be >= 55v)
Mechanical	
ODU Dimensions	19.5(w) x 12.5(h) x 4.0(d) cm
ODU Weight	0.5 kg / 1.10 lbs.
Power	
Power Consumption	<13W
Environmental	
Operating Temperatures	-35°C to 60°C / -31°F to 140°F
Humidity	100% condensing, IP67 (total protected against dust and immersion in water up to 1m)
Certificates	
Safety	EU / Int., FCC
EMC	FCC, ETSI, CANADA, AS/NZS

RADWIN

RADWIN Ltd Corporate Headquarters

+972.3.766.2900 | sales@radwin.com