

RADWIN 2000 Alpha Point-to-Point Series

500 Mbps Carrier Class Solution

Delivering up to 500 Mbps, RADWIN 2000 Alpha is part of the RADWIN 2000 PtP portfolio of carrier-grade solutions.

Compact and durable, RADWIN 2000 Alpha guarantees exceptional radio performance at a competitive industry price. Alpha also features RADWIN's unique and field proven air-interface, ensuring stable and reliable operation in the unlicensed spectrum.

RADWIN 2000 Alpha is the optimal solution for high-speed wireless enterprise access and robust backhaul for a variety of applications such as video surveillance.

RADWIN 2000 Alpha Highlights

- Available in 3 models: 50 Mbps | 250 Mbps | 500 Mbps
- Operational in 3.4-3.8, 4.9-6.0 GHz
- Up to 120 km / 75 miles
- Inter and Intra TDD synchronization
- IP 66 / IP 67
- Operable as SU PRO

Applications

- Wireless enterprise access
- · Video surveillance backhaul
- · Leased lines replacement
- Building to building connectivity

RADWIN 2000 Alpha Benefits

- Pay as you grow capacity 50 Mbps upgradable to 250 Mbps via license key
- Guaranteed high capacity in short packets (350K PPS)
- Multiple antenna configurations:
 - Alpha EMB (available in 5.x GHz only)
 connectorized outdoor unit with a 16dBi embedded antenna. 3rd party antennas can be used to extend the range when needed.
 - Alpha INT outdoor unit with high gain integrated antenna
- TDD synchronization supporting colocation of multiple radios
- Reliable link in congested spectrum and tough path conditions
- Unparalleled performance at lowest TCO



RADWIN 2000 Alpha EMB

Product Specifications

Configuration		
Architecture	Outdoor connectorized unit with embedded antenna	Outdoor unit with integrated antenna
PoE to ODU Interface	Outdoor CAT-5e; Maximum cable length: 10/100/1000BaseT	
Radio		
Capacity	5.x GHz: 50 Mbps (software upgradable to 250 Mbps) 250 Mbps 500 Mbps	
		3.x GHz: 500Mbps
Range	Up to 120 km / 75 miles	Up to 40 km / 25 miles
Frequency Band	5.x : 4.9- 6.0 GHz	5.x: 4.9-6.0 GHz , 3.x: 3.4-3.8 GHz
Channel Bandwidth	Configurable: 10, 20, 40, 80 MHz; Dynamic Channel BW selection (20/40/80 MHz)	
Modulation	MIMO-OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)	
Adaptive Modulation & Coding	Supported	
Auto selection MIMO / Diversity	Supported	
Max Tx Power	24dBm	5.x GHz: 26dBm , 3.x GHz: 25dBm
Embedded Antenna	5.x GHz: 16dBi	5.x GHz: 22dBi, 3.x GHz: 19dBi
Duplex Technology	TDD	
Regulation	5.x GHz: ETSI, WPC, MII, NCC, UNI	5.x GHz : FCC, IC, ETSI, WPC, MII, NCC, UNI
		3.x GHz : ETSI, UNI
Encryption	AES 128	
Supported Indoor Units	RADWIN PoE device	
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	
ODU Management	IPv4; IPv6; SNMP v1, SNMP v3; HTTP, HTTPS using web browser	
Mechanical		
ODU Dimensions (w/h/d)	18.2 cm x 18.2 cm x 6 cm	32.5 cm x 32.5 cm x 6.4 cm / 12.8" x 12.8" x 2.5"
ODU Weight	0.5 kg / 1.10 lbs	2 kg / 4.4 lbs
Power		
Power Consumption	<12W	
Environmental		
Operating Temperatures	-35°C to 60°C / -31°F to 140°F	
Humidity	100% condensing	
Durability	IP66	IP67



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