

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 co-location of multiple radios
- Reliable link in congested spectrum and tough path conditions
- Unparalleled performance at lowest TCO



RADWIN 2000 Alpha INT

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