



Product Overview



WinLink™ 1000 All-Indoor Solution
High Capacity Carrier-Class Radio System

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RADWIN's WinLink™ 1000 All-Indoor point-to-point wireless broadband solution delivers T1s+Ethernet over the 2.4 and 5.8 GHz spectrum bands with carrier-class reliability at an unprecedented price. Providing a unique single enclosure design for the radio and multiplexer units, the WinLink™ 1000 All-Indoor solution affords maximum flexibility in installation and maintenance processes.

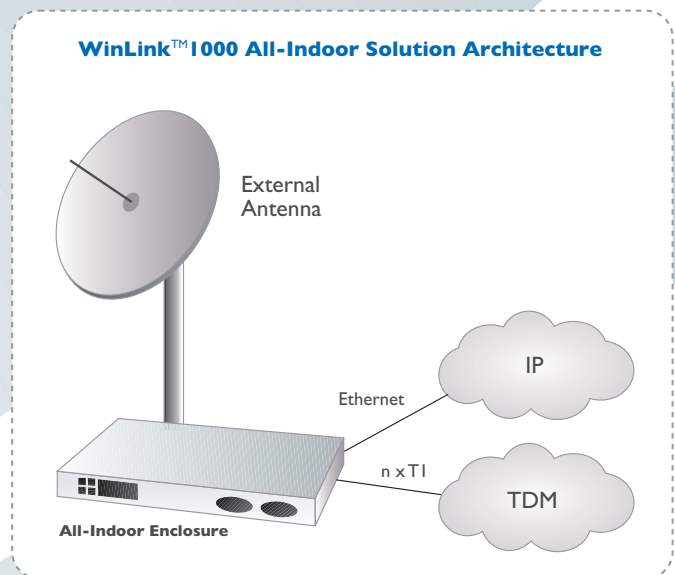
By enabling installation in street cabinets, eliminating the need to deploy radios on outdoor towers or rooftops, the WinLink™ 1000 All-Indoor solution significantly reduces radio installation and maintenance costs. Costs are further reduced through remote maintenance and easy upgrades, and diagnostics that provide the ability to address problems on the spot.

The WinLink™ 1000 All-Indoor solution is FCC compliant. Operating at ranges of up to 50 miles with high capacity connectivity of up to 48 Mbps, RADWIN's solution provides high reliability and robustness for cellular backhauling and broadband access applications. And because the WinLink™ 1000 All-Indoor solution operates in license-exempt frequencies, it can be deployed in record time - eliminating the costs and delays involved in leasing lines or trenching fiber.

For operators who want to deliver carrier-class T1s+Ethernet services, require hassle-free installation and maintenance, and need to lower total cost of ownership – RADWIN's WinLink™ 1000 All-Indoor solution is the answer.

WinLink™ 1000 All-Indoor Architecture

RADWIN's WinLink™ 1000 All-Indoor solution provides a unique single enclosure design for the radio and multiplexer units. The indoor unit is connected to an external antenna via a coaxial RF cable.



Radio

Frequency Bands	2.400 – 2.4835 GHz 5.725 – 5.850 GHz
Data Rate	Configurable, up to 48 Mbps (bi-directional)
Channel Bandwidth	20 MHz (next phase: 5/10/20 MHz)
Duplex Technique	TDD
Modulation	OFDM – BPSK/QPSK/16QAM/64QAM
Max Transmitter Power	23 dBm
Receiver Dynamic Range	>60 dB
Error Correction	FEC k=1/2, 2/3, 3/4
Encryption	AES 128
Antenna Connector	Female N-type, 50Ω impedance

Note: Loss of RF cable connecting the AIND device to the antenna should be considered when Link Budget is calculated.

TI Interfaces

Framing	Unframed (transparent)
Number of TI Ports	Up to 4 (next phase: up to 8)
Standards Compliance	ITU-T G.703, G.826
Timing	Plesynchronous (Independent Tx and Rx timing)
Line Code	B8ZS/AMI @ 1.544 Mbps
Latency	8 msec
Impedance	100Ω, balanced
Connector	RJ-45
Jitter & Wander	According to ITU-T G.823, G.824

LAN Interfaces

Type	10/100BaseT Interface with Auto-negotiation (IEEE 802.3)
Number of Ethernet Ports	2
Framing/Coding	IEEE 802.3/U
Maximum Frame Size	1,536 Bytes
Bridging	Self-learning up to 2047 MAC addresses IEEE 802.1Q
Traffic Handling	MAC layer bridging, self-learning
Data Latency	3 msec typical
Line Impedance	100Ω
VLAN Support	Transparent
Connector	RJ-45

Management

Protocol	SNMP based
Network Management	SNMPc based
Upgrade Capabilities	Local and remote software upgrades
Diagnostics	Local and remote loopback testing

Mechanics

Dimensions	16.9" (W) x 11.4" (D) x 1.8" (H)
Weight	6.6 lbs / 3Kg

Power and Mounting

Power Feeding	110/220VAC, 50/60Hz, -24VDC/-48VDC
Power Consumption	14W Max
Mounting	19" Rack Mount

Environmental

Operating Temperatures	-35°C - 60°C / -31°F - 140°F
Humidity	Up to 95% non-condensing

