

RADWIN 2000 is the high-capacity addition to RADWIN's Point-to-Point sub-6GHz Microwave portfolio that addresses the backhaul needs of today's and tomorrow's IP networks. Built on RADWIN's unique air interface, together with most advanced MIMO and OFDM technologies, RADWIN 2000 delivers optimal performance and unmatched robustness in all environments. Simple to install and easy to maintain, RADWIN 2000 is designed to meet operators' field requirements and results in significantly decreased cost of ownership.

Supporting multiple bands and frequencies over a single radio platform, RADWIN 2000 provides 50 Mbps full-duplex net throughput and a range of up to 120km/75 miles.

The flexible radio system is ideally suited for a variety of Ethernet applications, including WiMAX and IP backhaul, private networks, and high-capacity data transport.

Advanced Radio Technologies Inside

RADWIN 2000 deploys today's most advanced radio technologies to achieve unparalleled performance in sub-6GHz bands.

- **MIMO**

MIMO spatial multiplexing gives the RADWIN 2000 the power to increase channel capacity. The high-rate information signal is split into two lower-rate streams, with each stream transmitted from a different antenna on the same frequency channel. RADWIN's MIMO technology provides a considerable increase in data throughput and link range without the need for additional bandwidth or transmit power.

- **OFDM Modulation**

OFDM is regarded as the leading modulation technique for multi-path and signal-intensive environments, enabling effective transmission of large amounts of digital data over a radio link. OFDM features low overhead, low latency, and high resiliency to interference. Based on the concept of redundant transmission, OFDM works by splitting the radio signal into multiple, smaller sub-signals transmitted simultaneously at different frequencies to the receiver.

Superior Air Interface: Field-Proven Worldwide

RADWIN 2000 employs interference-resistant mechanisms specially designed by RADWIN for sub-6GHz bands. These unique mechanisms are successfully deployed with RADWIN products in over 100 countries.

- **Robust Air Protocol**

RADWIN 2000 incorporates a robust air interface with a unique air protocol designed to ensure non-stop, high-quality transmission, even when challenged by interference and harsh conditions. The air interface is partially based on RADWIN's unique Automatic Repeat Request (ARQ) mechanism, which detects and resends corrupted or missing data to maintain transmission quality, while ensuring short delay and non-interrupted transmission, despite significant interference levels.

- **Automatic Channel Selection**

Automatic Channel Selection ensures that transmission is performed on the best possible channel by monitoring available channels and dynamically selecting the optimal channel in response to interference.

