

EtherHaul™ - 5500FD Datasheet



5Gbps 70/80GHz Radio – High Bandwidth for Demanding Networks

The EH-5500FD delivers 5Gbps full duplex layer 1 throughput for demanding networks in the metro, aggregation and trunking applications. 10Gbps full duplex available with Siklu OMT 2+0 kit.

Applications for a Wide Range of Vertical Markets

- Fiber Extension
- Business Broadband
- Metro and Aggregation Networks
- Fiber Backup
- Smart City Aggregation

Creates Resiliency and Availability

The EH-5500FD easily integrates with Ethernet switches or MPLS routers to easily extend or backup any fiber connection while maintaining highest layer 1 transparency with sub-10 micro seconds latency.

Small Size, Easy to Deploy & Manage

The all-outdoor radio has a small footprint that alleviates site acquisition. Its light-weight and small size make for a quick and easy installation, while the intuitive web GUI manages local and remote units to enable fast commissioning and configuration.

Based on Siklu's Field Proven Platform

The EH-5500FD is the high-capacity 5Gbps evolution of the best-selling EtherHaul™ series - the world's most deployed millimeter wave radio. Tens of thousands of links have been deployed and are performing reliably in diverse weather conditions all over the globe.

Fast Spectrum Acquisition at Affordable Cost

The E-band spectrum is uncongested, even in rural or dense urban areas. Using a high-gain pencil-beam antenna, guarantees available spectrum anywhere and maximizes spectrum re-use. Additionally, the E-band technology offers low licensing fees and quick licensing processes.

Exceptional Value

The EH-5500FD provides fast return on investment (ROI) and minimizes total cost of ownership (TCO). The advanced 5Gbps system delivers an unbeatable price per MB. Its small and light form factor lowers installation costs, increases reliability and reduces site visits. Ultra-fast activation time with the unbeatable reliability will become your 'winning card' in any competitive environment.

Robust & Futureproof

The EH-5500FD radio delivers 5Gbps full duplex (10Gbps with OMT 2+0) point-to-point wireless Ethernet connectivity to futureproof your network. Operating over the interference-free 71-76/81-86GHz band, the FDD EH-5500FD has additional output power and wider channels, making it easy for providers and enterprises to extend their networks by very quickly adding affordable, high capacity wireless links that are easy to install and maintain.

Carrier Grade Performance over Wireless

High throughput and layer 1 low latency are combined to deliver fiber like performance. The EH-5500FD incorporates adaptive bandwidth coding and modulation for high availability.



EtherHaul™ - 5500FD Specifications



Frequency & Duplexing	71-76GHz / 81-86GHz*, Frequency-division duplexing (FDD)
Modulation & Adaptive rate	BPSK-1/BPSK-2/QPSK-1/QAM16/QAM32 adaptive bandwidth, coding and modulation - boost gain by up to 21.5dB
Channels	User selectable, 3x 1250MHz wide, non-overlapping
Throughput	2Gbps, license-key upgradeable to 5Gbps ; 10Gbps with an OMT 2+0 configuration^
System gain	At maximum capacity: 71.5dB; At minimum modulation: 93dB
Antenna options	0.5ft. (16 cm) - 38dBi antenna gain 1ft. (31cm) – 43dBi antenna gain 2ft. (65cm) – 50dBi antenna gain
Reach	1.5 miles at maximum capacity; 2.4 miles at minimum capacity; Rain zone K at 99.99% availability, with 2ft. antennas.
Interfaces	1x 10GE port SFP+ payload interface; 1x copper RJ45, management only;
Power supply	36 - 57VDC (flexible grounding) ; 45W Direct DC or PoE-in via management port
Management & provisioning	Out-of-band local management & over-the-air remote management Web GUI (one-click configuration of local and remote units) Embedded CLI SNMPv2/3, TACACS+, RADIUS Zero-touch turn up
Conformance	Radio: USA FCC Part 15.101 & ETSI EN 302 217; EMC: USA FCC 47CFR.part 15 & ETSI EN 301 489; Safety UL/EN 60950
Environmental	Operating Temperature: -45° to +55°C (-49° to +131°F) Ingress Protection Rating: IP67
Dimensions	ODU + 0.5ft antenna: 9.17” x 8.11” x 5.55” (23.3cm x 20.6cm x 14.1cm) ODU + 1ft antenna (Dia. x Depth): 31cm x 13cm (12.2” x 4.3”) ODU + 2ft antenna (Dia. x Depth): 65cm x 37cm (25.6” x 15.35”)
Weight	ODU + 0.5ft antenna: 9.2lbs. (4.2kg) ODU + 1ft. antenna: 9.9lbs. (4.5kg) ODU + 2ft. antenna: 24.3lbs (11kg)

* spectrum subject to local radio spectrum regulations

** SW license

^10Gbps solution available with 2ft. antennas only; Link budget reduced by 2dB;
For solution's details read "Technical Note: EtherHaul™ OMT – 10Gbps 2+0"

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