

EH-8010FX Datasheet

10Gbps 70/80GHz Radio – Wireless Fiber Connectivity

The EH-8010FX delivers up to 10Gbps Full Duplex throughput for high capacity networks in Metro, Aggregation and Infrastructure or Backhaul applications.

Applications for a Wide Range of Vertical Markets

- Fiber Network Extension/ Backup
- Enterprise Multi Gigabit-Connectivity
- Metro and Aggregation Networks
- Multi-Dwelling Unit Gigabit Broadband

Up to 10Gbps Over Long Distance

The EH-8010FX radio delivers up to 10Gbps full duplex point-to-point wireless Ethernet connectivity with the longest mmWave reach by means of the highest system gain in the market.

Carrier Class Construction and Performance

High throughput and low latency combine to deliver fiber compatible performance. The EH-8010FX incorporates adaptive bandwidth coding and modulation together with QoS awareness⁽¹⁾ for high availability and easy integration with Ethernet switches or MPLS routers in highly resilient topologies. The EH-8010FX is designed to connect into existing networks with its support for both copper and fiber 10G interfaces allowing service providers and enterprises to extend their copper or fiber networks.

Small Size, Easy to Deploy & Manage

The all-outdoor radio has a small footprint and is light weight which makes site acquisition a breeze. The product comes pre-configured out of the box with no license to download greatly simplifying the time and cost for installation. The intuitive web GUI manages local and remote units to enable fast commissioning and configuration.

Wire-speed, AES Secure

Innovative all-HW bridging and AES encryption ensure high-throughput and low latency at any traffic load levels or packet sizes, maintaining high performance and no bottle necks for all the services in the network backbone.



Exceptional Value, from 2Gbps to 10Gbps

Scalable capacity from 2Gbps full duplex to 10 Gbps full duplex allows deploying what you need and when you need. And with its IP67 construction, the EH-8010FX is extremely rugged and designed to last for years of growth in the harshest conditions at a price that yields quick Return-On-Investment (ROI) and minimizes Total Cost of Ownership (TCO). The advanced up-to-10Gbps system delivers an unbeatable price per Gb. Its small and light form factor lowers installation costs, increases reliability and reduces site visits.


Massive Spectrum Availability, and High Reuse

The EH-8010FX operates over the interference-free 71-76/81-86GHz E-Band spectrum, with a total of 10GHz of bandwidth for use worldwide. By using a high-gain pencil-beam antenna, this helps guarantee spectrum will be available everywhere and maximizes spectrum re-use. Additionally, E-band systems are governed by low licensing fees and quick licensing processes.



EH-8010FX Specifications



Frequency / Duplexing	71-76GHz / 81-86GHz, FDD
Channel Bandwidth, Modulation & Adaptive Coding	250, 500, 1,250 & 2,000MHz; BPSK to QAM128; Up to 9 levels of hitless adaptive bandwidth, coding and modulation - boost gain by over 29dB
Throughput	Up to 10,000Mbps full duplex (with capacity license)
System Gain	64 / 93 dB (channel bandwidth = 2,000MHz, maximum capacity / minimum modulation) 75 / 97.5 dB (channel bandwidth = 500MHz, maximum capacity / minimum modulation)
Antenna Options	0.5 ft. (16 cm) - 38dBi antenna gain (not applicable for FCC regulation) 1 ft. (31cm) - 43dBi antenna gain 2 ft. (65cm) - 50dBi antenna gain
Reach	10Gbps: 1.7/2.4 mile (2.7/3.8 km) @ 99.95% availability (2000MHz, rain zone K/E, 2ft ANT.) 2Gbps: 2.4/3.5 mile (3.8/5.6 km) @ 99.95% availability (500MHz, rain zone K/E, 2ft ANT.)
Interfaces	1 combo 10GE port: 802.3ab/bz/an (RJ-45, CAT6a or better) or SFP+ (MMF or SMF) 1GE port: 802.3ab (RJ-45, CAT5 or better)
Power Supply	Dual input: PoE++ (4 pairs 802.3at type 2 PD) or 42÷57VDC; 50W; Hot standby
Management & Provisioning	In / Out-of-band management; Web GUI or CLI IPv4 or IPv6 SNMPv2/3, TACACS+, RADIUS Zero-touch turn-up
Ethernet features	Ethernet transparent bridge with flow control VLAN and VLAN stacking ⁽¹⁾ Jumbo frames Configurable QOS aware forwarding ⁽¹⁾ : 8-levels, L2: 802.1p, L3: DSCP
Security	AES 128-bits (order based HW model) 
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: 11" x 8.2" x 5.7", 28cm x 21cm x 14.5cm (H x W x D) ODU + 1ft antenna: 12.6" x 8.2", 32cm x 21cm (Dia. x Depth) ODU + 2ft antenna: 25.6" x 13.4", 65cm x 34cm (Dia. x Depth)
Weight	ODU + 0.5ft antenna: 9.2lbs. (4.1kg) ODU + 1ft. antenna: 9.9lbs. (4.4kg) ODU + 2ft. antenna: 24.3lbs (10.9kg)

(1) HW revision dependent

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