EtherHaul™-1200F & EtherHaul™-1200T

Mobile Backhaul & LTE-Ready E-band Radio

The EtherHaul-1200F and EtherHaul-1200T radios provide wireless point-to-point Gigabit Ethernet connectivity. Designed to meet the growing need of service providers for high-capacity, carrier-grade, secure and future-proof mobile backhaul, these radios provide Gigabit throughput, MEF-compliant networking and QoS. Enhanced Hitless Adaptive Bandwidth, Coding & Modulation maximizes spectral efficiency and improves link availability.

The EH-1200F/T radios are based on Siklu's revolutionary integrated-silicon technology, which results in an all outdoor, highly reliable, small, light-weight, cost-effective radio that is field-proven in thousands of installations. They support network synchronization, ring protection, and feature multiple GbE interfaces enabling complex network topologies, such as daisy chain, ring and mesh.

Operating in the uncongested and inexpensively-licensed E-band spectrum, Siklu's radios feature the advantages of both TDD and FDD technologies:

- EH-1200F: operates at 71-76GHz and 81-86GHz, in FDD technology

- EH-1200T: operates at 71-76GHz in TDD technology

Highlights

FIELD PROVEN — Thousands of units are deployed and operating smoothly under all weather conditions.

- Field proven technology
- Reduced TCO and fast ROI
- Integrated silicon solution
- High performance
  - ✓ High throughput, low latency
  - ✓ Fiber-like functionality
- High spectrum efficiency
  - ✓ Uncongested E-band spectrum
  - ✓ Hitless adaptive bandwidth coding and modulation for high availability
- Advanced layer-2 features:
  - ✓ MEF-compliant QoS
  - ✓ VLAN, Provider Bridge
  - ✓ SLA assurance
- All-outdoor small footprint
  - ✓ Small and light
  - ✓ Quick and easy to install
- AES encryption
- Network synchronization
- Zero touch installation

Typical Applications

- Mobile Backhaul
- Fiber Extension
- Business Services Connectivity
- LAN to LAN Connectivity

EtherHaul™-1200F/T Specifications

Frequency, duplexing scheme	EH-1200F: 71-76/81-86GHz, FDD ; EH-1200T: 71-76GHz, TDD
Modulation	QPSK/QAM16/QAM64
Adaptive rate	Hitless adaptive bandwidth, coding and modulation, boosting system gain by 25dB
Throughput	EH-1200F- Up to 1000Mbps (FD) EH-1200T- Up to 1000Mbps aggregated(with asymmetric/symmetric downlink/ uplink rate support)
Link Budget (BER=10^{-6})	182dB (including 1ft antennas gain) ; 196dB (including 2ft antennas gain)
Interfaces	4xGbE ports: a combination of 1000BaseT and SFP slots
Antenna	Integrated 1ft (31cm), 43dBi ; External 2ft (65cm), 50dBi
Power	PoE+ (IEEE 802.3at with power boost) Wide-voltage input: ±21-57VDC Power supply input redundancy
Ethernet features	VLAN (IEEE 802.1q) and VLAN stacking (Q-in-Q, IEEE 802.1ad Provider Bridge) IEEE 802.1d Transparent Bridging QoS, traffic shaping, and policing MEF 9,14 and 21 compliant Ethernet OAM and CFM (IEEE 802.1ag / ITU-T Y.1731 / IEEE 802.3ah) Ethernet Ring Protection (ITU-T G.8032) Jumbo frames up to 16k
Synchronization	IEEE 1588v2 TC Synchronous Ethernet ITU-T G.8261/8262/8264
Network topologies	Ring, daisy chain, mesh and hot standby
Encryption	AES 128-bit and 256-bit
Management	In-band, out-of-band, embedded CLI, web GUI, SNMPv2/3
Environmental	Operating temperature: -45° ÷ +55°C
Ingress protection rating:	IP67
Regulatory	ETSI EN 302 217-3, CE marked, EMC, safety UL60750
Dimensions	ODU (H x W x D) - 24.5 cm x 22.5 cm x 7 cm (9.7" x 8.9" x 2.75") ODU + 1ft Antenna (Dia. x Depth) - 31 cm x 13 cm (12.2" x 4.3") ODU + 2ft Antenna (Dia. x Depth) - 65 cm x 37 cm (25.6" x 15.35")
Weight	ODU + 1ft antenna: 4 kg (8.8 lbs) ODU + 2ft antenna: 10Kg (23 lbs)