

# EtherHaul™- 1200F E-Band Radio

1000 Mbps full duplex LTE/LTE-A/4G ready

## **Design a Future-Proof Wireless Network**

The EtherHaul-1200F radio delivers ultra high capacity wireless point-to-point Ethernet connectivity that future-proofs your backhaul network. With a throughput of 1000 Mbps full duplex over the uncongested 71-76/81-86 GHz spectrum using FDD, mobile operators can deploy affordable, high capacity wireless links that are easy to install and maintain.

## Based on a Cost Reducing All-Silicon Technology

The EH-1200F radio is based on Siklu's advanced integrated-silicon technology, which increases reliability and reduces size and cost. The result is a very small, very light radio with a 90-year MTBF and an unbeatable price/throughput.

### **Easy Spectrum Acquisition in Urban Areas**

The E-band spectrum is uncongested, even in dense urban areas. Use of a high-gain, pencil-beam antenna guarantees available spectrum anywhere and maximizes spectrum re-use. E-band also offers low licensing fees and quick licensing processes.

## Streamline Operations with Carrier Ethernet & Synchronization

The EH-1200F has MEF-compliant integrated Carrier Ethernet that streamlines operations with bandwidth-aware QoS, service management and OAM. For mobile operators, built-in synchronization with Sync-E or 1588V2 ensures smooth performance over packet backhaul.

#### **Build Up Resiliency and Availability**

The EH-1200F comes with an integrated L2 switch and extra ports so you can deploy in ring, mesh or any high resiliency topology you need. It also incorporates Hitless Adaptive Bandwidth Coding and Modulation for high availability.

## **Typical Applications**

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

## **Small Size, Easy to Deploy & Manage**

The all-outdoor radio has a tiny footprint that eases site acquisition. Its light weight and small size contribute to a quick and easy installation. Easy to use web GUI manages local and remote units and can copy configuration changes automatically to remote.

### **Field Proven Best Seller**

The EtherHaul-1200 is the world's best selling millimeter wave radio. Thousands of units have been deployed and are performing reliably in varying weather conditions all over the globe.

### Improves the Bottom Line

The EH-1200F provides a fast return on investment (ROI) and minimizes total cost of ownership (TCO). The all-silicon design delivers unbeatable price/MB; small and light form factor lowers installation costs, and the high reliability reduces site visits.



## EtherHaul™- 1200F Specifications

Frequency, duplexing scheme	71-76/81-86GHz, FDD
Modulation	QPSK-1/QPSK-2/QPSK-3/QAM16/QAM64
Adaptive rate	Hitless adaptive bandwidth, coding and modulation, boosting system gain by 25dB
Throughput	Up to 1000 Mbps full duplex
Link budget (BER=10 <sup>-6</sup> )	182dB (including 1ft antennas' gain) ; 196dB (including 2ft antennas' gain)
Interfaces	4xGbE ports: 2 RJ-45 + 2 SFP slots or 1 RJ-45 + 3 SFP slots
Antenna	Integrated 1ft (31cm), 43dBi; External 2ft (65cm), 50dBi
Power	PoE+ (IEEE 802.3at with power boost) Wide-voltage input: ±36+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, provisioning & commissioning	Web GUI (one click management of local & remote units), embedded CLI, SNMPv2/3, in-band, out-of-band Zero touch turn-up, TACACS+, RADIUS
Environmental	Operating temperature: -45° ÷ +55°C Ingress protection rating: IP67
Regulatory	ETSI EN 302 217, FCC 47 CFR part 101, CE marked, EMC, safety UL60950
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: 4.5Kg (9.9 lbs) ODU + 2ft antenna: 10.7Kg (23.5 lbs)

