

# EtherHaul™ 1200 Series Datasheet



## Carrier-Grade 1000Mbps E-Band radio

The EtherHaul-1200 series provides carrier grade Gigabit connectivity with fast ROI

### Applications for a Wide Range of Markets

- Business Broadband
- GTTH - Gigabit To The Home
- Mobile Backhaul
- Campus Connectivity
- Video Surveillance Connectivity

### Most Deployed Millimeter Wave Radio in the World

The EtherHaul-1200 series delivers carrier-grade ultra high capacity wireless point-to-point Ethernet. With up to 1000Mbps full-duplex over the uncongested 71-76/81-86GHz spectrum, the EH-1200 provides service providers and businesses around the world with an affordable, advanced wireless solution that is easy to install and maintain.

### No Interference – Reliable Operations

Characterized by pencil thin beams, E-band radios guarantee no interference and high reliability. The EH-1200 series has up to 32 non-overlapping channels that are user selectable, making it the most scalable solution on the market for dense deployments.

### Easy Spectrum Acquisition Anywhere

The E-band spectrum is uncongested, even in dense urban areas. E-band offers low licensing fees and quick coordination processes, while maintaining the advantage spectrum protection.



### Carrier Grade Performance over Wireless

High throughput and low latency combine to deliver fiber-like performance. Siklu's EH-1200 series incorporates 8 levels of configurable QoS-aware, hitless adaptive bandwidth coding and modulation for high availability. An integrated L2 switch and extra ports enable implementation in resilient topologies like cascade or ring, without the need for additional equipment.

### Streamline Operations with Carrier Ethernet & Synchronization

The entire 1200 product line comes with MEF-compliant integrated Carrier Ethernet features that streamline operations with service management and OAM. In addition, the F and T series are designed for mobile operators, with built-in Sync-E and 1588v2 to ensure smooth operation over packet backhaul.

### Optional Asymmetric Capacity Optimization

Both T and TX models, with their unique TDD duplexing, allows you to set-up asymmetric capacity configuration. Match your upload/download rates to your application and optimize use of spectrum, reduce power requirements and lower both CAPEX and OPEX.

### Small Size, Easy to Deploy & Manage

The all-outdoor radio has a tiny footprint that eases site acquisition. Its lightweight and small size contribute to a quick and easy installation. Easy to commission and operate with an integrated capacity-tester and a user friendly intuitive web GUI, manages local and remote units, while also allowing commissioning from a NOC.

### Based on a Cost Reducing All-Silicon Technology

The EH-1200 series are 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 proven 90-year MTBF and an unbeatable price/throughput.

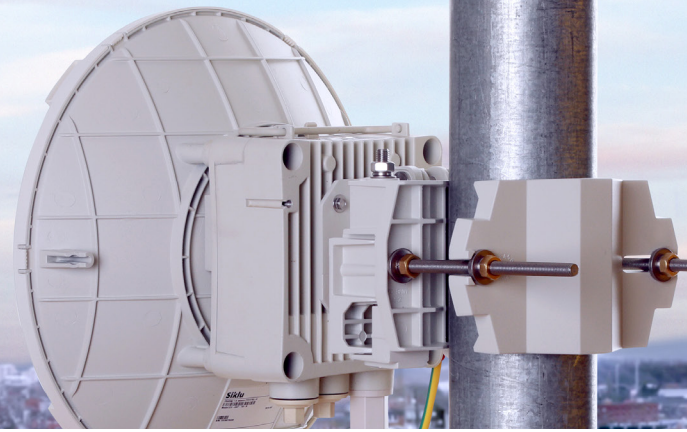
The small and light form factor lowers installation costs, and the high reliability reduces site visits, lowering TCO even further.

### Best ROI for any Application

The EH-1200 is available in TDD and FDD duplexing schemes, with throughputs scaling up to 1000Mbps full duplex. Selectable antenna sizes, range from street-level ½ft\* to rooftop 1ft. and 2ft. models, and match footprint with distance and link availability requirements.

\*½ft antenna model with 38dBi gain, subject to local regulation scheme

# EtherHaul™ 1200 Series Specifications



		EH-1200TX	EH-1200T	EH-1200FX	EH-1200F
Frequency & Duplexing	71-76GHz, TDD	✓	✓	-	-
	71-76GHz / 81-86GHz, FDD	-	-	✓	✓
Channels	32/16/8 non-overlapping channels, 125/250/500MHz wide	✓	✓	-	-
	16/8 non-overlapping channels, 250/500MHz wide	-	-	✓	✓
Modulation & Adaptive rate	5 level of hitless adaptive bandwidth, coding and modulation - boost gain by up to 25dB	QPSK ÷ QAM64			
Throughput	Up to 1Gbps	TDD	TDD	FDD	FDD
Link budget (BER=10 <sup>-6</sup> )	Including ½ft antenna gain(not applicable for FCC regulation)	166dB	166dB	172dB	172dB
	Including 1ft antenna gain	176dB	176dB	182dB	182dB
	Including 2ft antenna gain	190dB	190dB	196dB	196dB
Interfaces	4xGbE ports, (2x copper RJ-45 + 2x optical SFP SMF/MMF)	✓	✓	2x RJ45	✓
Ethernet features	IEEE 802.1d transparent bridging. VLAN & VLAN stacking, 4K VLANs MEF 9, 14 and 21 compliant Ethernet services. Smart Pipes Transparent Ports Mode Link aggregation: LAG and LACP (IEEE 802.3ad) Ethernet Ring Protection Switching: ITU-T G.8032 ERPS. Link state propagation. 16KB Jumbo frames. Configurable QoS-aware forwarding. 8 level H-QoS with multi mapping options: L2: 802.1p, VLAN id., L2½: MPLS EXP, L3: DSCP	✓	✓	✓	✓
Synchronization	Synchronous Ethernet and 1588v2 TC	-	✓	-	✓
Encryption	AES 128-bit and 256-bit	✓	✓	✓	✓
Management & Provisioning	Zero-touch turn up; In-band, out-of-band management Web GUI (one-click configuration of local and remote units) & Embedded CLI SNMPv2/3, TACACS+, RADIUS Link OAM & Connectivity Fault Management (CFM): IEEE802.3ah & IEEE802.1ag; Performance Monitoring: ITU-T Y.1731 IPERF TCP/UDP capacity tester	✓	✓	✓	✓
Topologies	Ring, daisy-chain, mesh	✓	✓	✓	✓
Conformance	Radio: FCC CFR Part 101, ETSI EN 302 217-2-2 EMC: USA FCC 47CFR part 15 & ETSI EN 301 489; Safety: UL/EN 60950	✓	✓	✓	✓
Power	PoE In PoE++ (IEEE 802.3at+) power consumption without PoE Out	26W	26W	40W	40W
Direct DC	36÷57VDC (flexible grounding)	✓	✓	-	✓
PoE-Out	Port 2 (IEEE 802.3at)	26W	26W	13W	13W
Environmental	Operating temperature: -45° to +55°C (-49° to +131°F) Ingress protection rating: IP67	✓	✓	✓	✓
Dimensions	ODU + 0.5ft antenna: 7.9" x 9" x 5.9" (20 x 23 x 15cm) ODU + 1ft antenna (Dia. x Depth): 12.6" x 8.6" (32 x 22 cm) ODU + 2ft antenna (Dia. x Depth): 28.7" x 18.1" (73 x 46 cm)	✓	✓	✓	✓
Weight	ODU + 0.5ft antenna: 8.5 lbs. (3.8 kg) ODU + 1ft antenna: 8.8 lbs. (4.0 kg) ODU + 2ft antenna: 20.7lbs. (9.4Kg)	✓	✓	✓	✓