



## EtherHaul™ 2X00 Series Datasheet



## Efficient 2Gbps E-band radio with extended range

The EH-2X00 series provides 2Gbps full-duplex capacity with extended range for accelerating broadband deployment in urban, suburban or rural areas. The carrier grade radio delivers fiber-like performance, reliability and throughput, with low CAPEX.

### Applications for a Wide Range of Markets

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

### Robust & Futureproof

The EH-2X00 series delivers up to 2Gbps full duplex point-to-point wireless Ethernet connectivity, achieved at only QAM32 modulation, that will future proof your network. Operating over the interference-free 71-76/81-86GHz band, the EH-2X00 makes it easy for providers and enterprises to extend their networks maintaining fiber-like performance.

### Carrier Grade Performance and Reliability

High throughput and low latency combine to deliver fiber-like performance. Siklu's EH-2X00 series hitless adaptive bandwidth coding and modulation, synced with user configurable 8 levels H-QoS, ensure correlated payload prioritization for high availability. An integrated L2 switch with fiber and copper ports enable implementation in resilient topologies like cascade or ring, without the need for additional equipment. In addition, the F series is designed for mobile operators, with built-in Sync-E and 1588v2 ensures the precise TDM synchronization across IP/MPLS/Ethernet backhaul networks.

### 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 commissioning from a NOC is possible.

### No Interference – Reliable Operations

Characterized by pencil thin beams, E-band radios guarantee no interference and high reliability. The EH-2X00 series has 16 non-overlapping channels that are user selectable, and also support both vertical and horizontal polarizations, 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 licensing processes, while maintaining the advantage of spectrum protection.

### Based on Siklu's Field Proven Platform

The EH-2X00 series with its extended-range variant is the 2Gbps evolution of the best-selling EtherHaul™ series - the world's top millimeter-wave radio. Tens of thousands of links have been deployed and are performing reliably in diverse weather conditions all over the globe.

### Exceptional Value

The EH-2500F/FX has additional output power and wider channels, making it the longest reach carrier-grade 70/80GHz radios on the market. The advanced 2Gbps system delivers an unbeatable price per MB. Its small and light form factor and simplified commissioning lower installation costs, and its field proven high reliability reduces site visits.

### Best ROI for any Application

The EH-2X00 is available with multi-step licenses for scalable rollouts. Selectable antenna sizes match footprint with distance and link availability requirements.



# EtherHaul™ 2X00 Series Specifications



		EH-2200FX	EH-2200F	EH-2500FX	EH-2500F
Frequency & Duplexing	71-76GHz / 81-86GHz*, Frequency-division duplexing (FDD)	✓	✓	✓	✓
Channels	16/8/5/3 non-overlapping channels, 250/500//750/1250MHz wide	Up to 500MHz	Up to 500MHz	Up to 1250MHz	Up to 1250MHz
Modulation & Adaptive rate	Up to 5 level of hitless adaptive bandwidth, coding and modulation - boost gain by up to 25dB	BPSK ÷ QAM32			
Throughput	2Gbps, Full Duplex	✓	✓	✓	✓
Link budget (BER=10 <sup>-6</sup> )	Including ½ft antenna gain (not applicable for FCC regulation) Including 1ft antenna gain Including 2ft antenna gain	170dB 180dB 194dB	170dB 180dB 194dB	176dB 186dB 200dB	176dB 186dB 200dB
Reach (miles)	2Gbps capacity (rain zone K at 99% availability, 2ft. ant.) 2Gbps capacity (rain zone K at 99.99% availability, 2ft. ant.) 1Gbps capacity (rain zone K at 99.99% availability, 2ft. ant.)	3.7 1.3 1.5	3.7 1.3 1.5	14.9 2 2.1	14.9 2 2.1
Interfaces	4xGbE ports, (2x copper RJ-45 + 2x optical SFP SMF/MMF)	✓	✓	✓	✓
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	✓	✓	✓	✓
Timing	Synchronous Ethernet and 1588v2 TC	-	✓	-	✓
Security	AES 128-bit and 256-bit (order based HW model)	✓	✓	✓	✓
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	✓	✓	✓	✓
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+), 45W without PoE-Out, 60W with PoE Out	✓	✓	✓	✓
Direct DC	36÷57VDC (flexible grounding)	✓	✓	✓	✓
PoE-Out	Port 2: up to 13W (IEEE 802.3af)	✓	✓	✓	✓
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)	✓	✓	✓	✓