

## EtherHaul™-2200F DataSheet



# 2-Gigabit, even for your densest networks

### Exceptional Wireless Subscriber Experience

The EH-2200F enhances network capacity by efficiently utilizing mmWave frequencies; boosting your network capacity with substantial CAPEX savings. Based on the world's most-deployed platform, EtherHaul. Small and cost-efficient, the carrier grade EH-2200F swiftly integrates with mobile backhaul networks.

### Applicable for a Wide Range of Networks

- Mobile Backhaul
- Wireless Internet Service Providers (WISPs)
- Business Broadband
- Video Surveillance Connectivity

### Differentiated Services Offering

The carrier-grade EH-2200F is MEF compliant. Operations are streamlined with 8-levels of bandwidth-aware QoS, service management and OAM, that may be leveraged to generate SLA parameters for varying service offerings. Built-in synchronization with Sync-E and 1588v2 meets stringent timing requirements (frequency and phase) for all generations of mobile networks.

### Efficient and Interference-Free

Siklu's solution accelerates fiber-grade expansion for capacity-hungry networks. Efficiently utilizing the abundant 70/80GHz band: the channel bandwidths 250MHz and 500MHz deliver 1 and 2 Gbps full-duplex, respectively. The combination of pencil-beams and mmWaves enable substantial reuse, so crucial in large-scale networks, which is leveraged to create fiber-like, interference-free services. The link planning process enables predictable performance design, and may be performed via Siklu's free online global intuitive link budget calculator.

### High Scalability

The EH-2200F provides scalability to enable the swift and dynamic expansion of urban wireless networks. Up to 2-Gigabit throughput and diminished latency are leveraged to create scalable future proof networks.

### Exceptional Value per Megabit

Siklu's new ultra-high-capacity solution is offered with goal-oriented, agile, and scalable ROI to help resolve networking issues, and save substantial OPEX and network expansion expenditures. Advanced cost effective all-silicon integration increases reliability and reduces costs.

### Speedy & Seamless Growth

The all-outdoor single box EH-2200F radio incorporates a multi-port Gigabit switch enabling speedy and seamless deployment; 2-Gigabit capacity is swiftly deployed to significantly reduce upgrade cycles. Zero touch installation with remote activation from a NOC enhances efficient network and services roll-out.

### Less is More: small & cost-effective

Creating value-rich wireless solutions with:

- Less units are required for aggregation
- Less energy to power the small radios
- Less associated pole attachment fees

### More is More: powerful & efficient

Accelerating powerful network aggregation with:

- More capacity to boost performance
- More efficiency and spectrum reuse

# EtherHaul 2200F Specifications

Frequency, duplexing	71-76 / 81-86 GHz, FDD
Modulation	BPSK1/BPSK2/QPSK/QAM16/QAM32
Adaptive rate	Hitless adaptive bandwidth, coding and modulation
Channel & Bandwidth	1000 Mbps@250MHz, 2000 Mbps@500MHz
Throughput	Up to 2000 Mbps full-duplex
Link distance	Up to 3.5Km at 99.995 availability
Link budget (i.e BER=10 <sup>-6</sup> )	1Gb: 179dB (including 1ft antenna gain); 193dB (including 2ft antenna gain) 2Gb: 176dB (including 1ft antenna gain); 190dB (including 2ft antenna gain)
Interfaces	4x GE ports: 2x copper + 2x fiber or 3x copper + 1x fiber
Antenna	1ft (31cm) - 43dBi antenna gain 2ft (65cm) - 50dBi antenna gain
Power supply	PoE+ (IEEE 802.3at) DC input: ±37-57VDC Power supply input redundancy
PoE out	PoE out 13W (IEEE 802.3af)
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	1588 TC Synchronous Ethernet ITU-T G.8261/8262/8264
Management and provisioning	Web GUI (one click management of local & remote units), embedded CLI, SNMPv2/3, in-band, out-of-band Zero touch turn-up, TACACS+, RADIUS
Encryption	AES 128-bit and 256-bit
Topologies	Ring, daisy-chain, mesh
Conformance	ETSI EN 302 217, FCC 47 CFR part 101:2009 CE marked, EMC, safety
Environmental	Operating Temperature: -45° - +55°C (-49° - +131°F) Ingress Protection Rating: IP67
Dimensions	ODU only: 24.5x22.5x7cm (9.7x8.9x2") ODU + 1ft Antenna: (Dia. x Depth) 31x13cm (12.2x4.3") ODU + 2ft antenna: (Dia. x Depth) 65x37cm (25.6x15.35")
Weight	ODU + 1ft antenna: 4.5 kg (9.9 lbs.) ODU + 2ft antenna: 9.4 Kg (20.7 lbs.)
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