

EtherHaul™ - 700 Series 70GHz Gigabit Wireless Bridge Datasheet

World's smallest E-band radio, for street-level & rooftop deployments

Interference-free Ethernet everywhere

The EtherHaul™-700 wireless bridge series delivers cost-efficient, interference-free, Ethernet connectivity. Operating over the uncongested lightly-licensed E-band, the point-to-point radio link is easily deployed on any street furniture or rooftop.

Wide Range of Applications

- Video Surveillance Connectivity (CCTV)
- Wi-Fi Hotspot Backhaul
- Business and Residential Broadband
- Campus Connectivity
- Mobile Backhaul

World's Smallest 70GHz Radio – less than 2 liters

The palm-sized radio simplifies site acquisition, and is quickly installed on any kind of street furniture or rooftop. The compact box solution incorporates, and comes with a choice of street-level 0.5ft. or 1ft. and 2ft. rooftops antennas for longer range. A GbE switch, with PoE-in and dual PoE-out. Easily cascade radios and power external devices like video surveillance cameras and Wi-Fi access points.

Easy Spectrum Acquisition in Urban Areas

The 5000MHz-wide 70GHz spectrum is uncongested, even in dense urban areas. The combination of abundant spectrum and high-gain, pencil beam antennas guarantee channel availability everywhere, and maximize spectrum re-use. The E-band also has low licensing fees and quick acquisition procedures.

Interference-Free and Predictable Performance

Characterized by pencil thin beams, E-band radios guarantee no-interference and high reliability. The EH-700 series has 32 non-overlapping channels that are user selectable, making it the most scalable solution on the market for dense deployments.

Robust & Futureproof

The all weather IP-67 sealed radio guarantees carrier–grade performance under even the harshest weather conditions. The combination of high capacity and low latency, along with the integrated switch and extra ports enables deployment in ring, mesh or extended cascading, with fewer aggregation units needed. The EH-700 also incorporates. The EH-700 assures flawless critical services delivery at any weather condition due to prioritized payloads with 8 levels of carrier-grade QoS, synced with hitless adaptive modulations.

Field Proven

Siklu's EH-700 series utilizes EtherHaul's groundbreaking, all-silicon technology to provide proven reliability. Tens of thousands of units are successfully deployed around the globe with a 90-year MTBF.

Easiest Installation & Management

Any installer can deploy the EH-700, no telco expertise necessary. Physical installation with out-of-the-box 8-levels of QoS- aware Ethernet services typically takes just 15 minutes. Optional advanced configuration is available via an intuitive Web GUI, while additional services may be remotely activated from a NOC. Integrated TCP and UDP load tester eases commissioning and remote trouble-shooting procedures, and advanced OAM provides continuity testing and service monitoring.

Exceptional Value

With minimal deployment costs and virtually no maintenance, the EH-700 series minimizes Total Cost of Ownership (TCO) and provides a Return On Investment (ROI) often measured in months; providing an unbeatable price/Mb.



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EtherHaul™ - 700 Series 70GHz Gigabit Wireless Bridge Specifications

		EH-700TX	EH-710TX	EH-710T
Frequency & Duplexing	71-76 GHz, TDD	√	√	√
Channels	125/250/500MHz wide, 32/16/8 non-overlapping channels	√	√	√
Modulation & Adaptive rate	Up to 5 level of hitless adaptive bandwidth, coding and modulation - boost gain by up to 25dB (18dB for EH-700TX)	Up to QAM 16	Up to QAM 64	Up to QAM 64
Throughput [Mbps]	Aggregated throughput up to	200	1000	1000
Link budget (BER=10^{-6})	Including 0.5ft antenna gain (not applicable for FCC regulation) Including 1ft antenna gain Including 2ft antenna gain	169dB 179dB 193dB	166dB 176dB 190dB	166dB 176dB 190dB
Interfaces	3xGbE copper ports	√	√	√
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	-	-	√
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 (*FTL). 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 supply	PoE+ (IEEE 802.3at), 26W without PoE-Out; up to 78W with PoE-Out	√	√	√
PoE-Out	Port 2 and Port 3 (IEEE 802.3at): 26W + 26W, 40W + 13W or 52W + 0W	√	√	√
Environmental	Operating Temperature: -45° to +55°C (-49° to +131°F) Ingress Protection Rating: IP67	√	√	√
Dimensions	ODU + 0.5ft antenna: 6” x 6.5” x 3.5” (16.5 x 16.5 x 10cm) ODU + 1ft antenna (Dia. x Depth): 12.2” x 4.3” (31 x 13 cm)	√	√	√

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