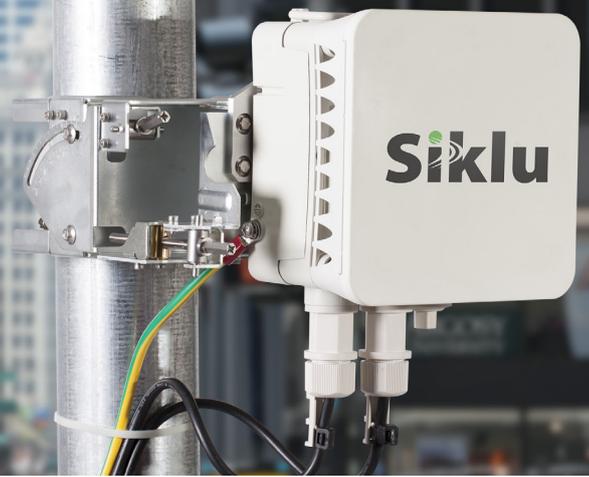# Siklu

EtherHaul™ – 500TX Datasheet

The Right Capacity - at the Right Price

Interference-free Ethernet everywhere

The EtherHaul-500TX wireless bridge delivers costefficient, interference-free, Ethernet connectivity.
Operating over an uncongested band, the point-to-point radio link is swiftly deployed on any street furniture to enable capacity-hungry services.

Applications for a Wide Range of Vertical Markets

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

World's Smallest 60GHz Radio – less than 2 liters

The palm-sized radio is swiftly and seamlessly integrated with street furniture - greatly alleviating site acquisition procedures. The one-box solution incorporates an integrated antenna and Ethernet switch, with PoE-In and dual PoE-Out. These features reduce the number of fragile cable-runs and power sources, and eliminate the need for external devices. Cascading radios and servicing supplementary devices such as surveillance cameras and Wi-Fi access points are simplified.

Plentiful License-Free Spectrum

Siklu's 60GHz solution utilizes the ample 9GHz-wide V-Band spectrum in the most efficient way known today. With 8/11 non-overlapping full capacity channels, which are also user-selectable, the EH-500TX provides the most cost-effective scalable solution on the market for dense street-level networks.

Interference-Free Communication

The non-linear high attenuation of the 60GHz spectrum is utilized to facilitate optimal matching between the link length and selected channel. This results in unmatched frequency reuse capabilities, while the inherent narrow beams further increase reuse factors. These features ensure interference-free, full capacity service, and empower networks with fiber-like connectivity.

Robust & Futureproof

The field proven, all-weather IP67 sealed radio guarantees predicted carrier grade performance, even in harsh conditions; facilitating futureproof investment and easily maintained SLAs. The combination of interference-free capacity and sub-millisecond latency is leveraged to create scalable street-level extended cascading, while reducing the number of aggregation points.

Field Proven

Siklu's 60GHz solution 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.

Versatile Integrated Toolkit

Siklu listens to customer pain points, and has combined the powerful network processor with the market's most advanced all-silicon RF circuit to ensure that service providers save OPEX:
- IPERF: integrated TCP and UDP load tester eases commissioning and remote trouble-shooting procedures.
- Spectrum Analyzer: eases operational channel selection and fault analysis.

Deploy & Go

With no Telco knowledge required, out-of-the-box 8-levels of QoS-aware Ethernet services may be deployed in just 15 minutes. Optional advanced configuration is available via an intuitive Web GUI, while additional services may be remotely activated from a NOC.

Exceptional Value

With minimal deployment costs and virtually no maintenance, the EH-500TX minimizes Total Cost of Ownership (TCO) and provides a Return On Investment (ROI) often measured in months; providing an unbeatable price/Mb.

EtherHaul™ - 500TX
Specifications

Frequency	57-64GHz / 57-66GHz*, TDD
Channels	8 / 11* non-overlapping channels; User selectable BW: 125/250/500MHz
Modulation & Adaptive rate	QPSK-1/QPSK-2/QPSK-3/QAM16/QAM64 hitless adaptive bandwidth, coding and modulation boost gain by up to 22dB
Throughput	Up to 200 Mbps aggregated ** (User selectable symmetric or asymmetric bandwidth allocation: 50%/50% or 75%/25%)
Interfaces	3xGbE copper ports
Reach	Typical: 700m; Maximum: 1,500m (rain zone-dependent)
Antenna	Integrated, 36dBi (built-in the ODU)
Power supply	PoE+ (IEEE 802.3at), 26W without PoE-Out; up to 78W with PoE-Out
PoE-out**	Port 2: up to 40W (IEEE 802.3at); Port 3: up to 26W (IEEE 802.3at)
Ethernet features	IEEE 802.1d transparent bridging Flexible 8-level QoS-aware SF/WFQ forwarding, based on VLAN-id/p-bits, IPv4 DSCP or MPLS EXP 4K VLANs 16K jumbo frames MEF 9,14 and 21 Redundancy and networking: LAG/LACP (IEEE 802.3ad), ERPS** (ITU-T G.8032)
Security	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) & Embeded CLI SNMPv2/3, TACACS+, RADIUS Link OAM** & Connectivity Fault Management (CFM)**: IEEE802.3ah & IEEE802.1ag Performance Monitoring*: ITU-T Y.1731 Spectrum analyzer & IPERF TCP/UDP capacity tester
Topologies	Ring, daisy-chain, mesh
Conformance	ETSI EN 302 217, UK IR 2078 & IR 2000, USA FCC Part 15.255, EMC, safety UL60950
Environmental	Operating Temperature: -45° to +55°C (-49° to +131°F) Ingress Protection Rating: IP67
Dimensions	ODU + integrated antenna: 5.9" x 6.1" x 3.5" (16.5 x 16.5 x 10cm)
Weight	ODU + integrated antenna: 3.9 lbs. (1.8 kg)

* 57-64/57-66GHz, 8 / 11 channels – subject to local radio spectrum regulations and HW version
** SW license dependent

Rev A1