

Why Millimeter Waves & Applications



- Fiber-like speeds of up to 10Gbps full duplex
- 60GHz, 70/80GHz bands – narrow beams, virtually no interference
- Massive amounts of available spectrum
- Lightly licensed and license-exempt bands | *(country dependent)*
- ROI - 3 to 4 times less expensive than trenching fiber and 1/10 of the time to revenue
- Extremely high reuse factor even in dense urban areas

mmWaves applications

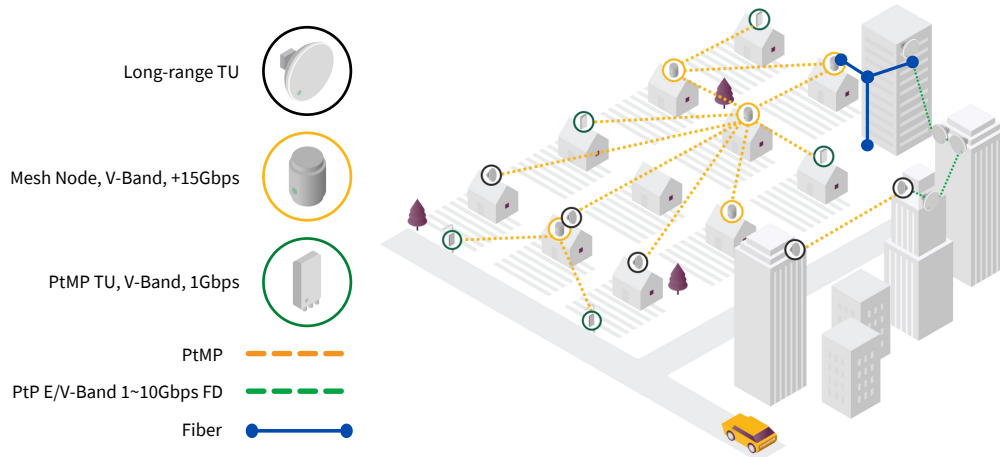
- Business / Residential 5G Fixed Wireless Access
- Surveillance Connectivity
- Smart Cities
- Wi-Fi Backhaul
- Fiber Extension / Redundancy
- Macro and Small Cell Backhaul



Siklu's Unique Selling Points



- Complete mmWave wireless offering - core to edge, PtP, PtMP, and L2 SDN mesh
- Cloud-Based network planning tool for automatic design of small to large networks, up to thousands of nodes
- Leading performance and range
- Recognized leader and innovator in mmWave technology since 2011
- Outstanding product quality and remote/on-site support



Point-to-Point – Rooftops / Towers

EtherHaul™ Kilo Series

- Lightly licensed 70/80GHz (E-Band)
- Integrated 1-click ExtendMM™* triples the distance and maintains connectivity during heavy rains
- Full-duplex capacity: 100Mbps to 10Gbps*
- Up to 32 non-overlapping channels
- Available with 0.5ft./1ft./2ft. antennas, single or dual-band (5GHz or 18GHz)



Point-to-Point – Street-Level / Rooftops

EtherHaul™ Hundred Series

- License exempt 60GHz (V-Band)
- TDD capacity: 100Mbps to 1Gbps*
- Up to 14 non-overlapping full-capacity channels
- Small footprint
- ODU + 0.5ft antenna: 6.5" x 6.5" x 3.9" (16.5 x 16.5 x 10cm)



Point-to-Multipoint – Street-Level / Rooftops

EtherHaul™ Series

- License exempt 60GHz (V-Band)
- TDD capacity: 100Mbps to 1.8Gbps*
- 90° sector beam-forming antennas with self-alignment
- Terminal Unit with automatic and/or IP-less provisioning
- cTU, the smallest mmWave radio in the industry: 6.5 x 3.1 x 1 in. (16.5 x 8 x 2.5 cm)



L2 SDN Mesh – Street-Level / Rooftops

MultiHaul™ TG Series

- Layer 2 Software Defined NW (SDN) mesh
- Auto alignment with no setup
- Up to 3.8 / +15 Gbps TDD capacity (link / node)
- Long-range options with dish antennas



Product (link)	Band	Configuration	Installation	Antennas	Base rate	Max rate*	Gigabit ports	Power [W]	PoE-out [W]	Networking features
MH-B100 (BU)	59-64GHz License-exempt	Point to Multi Point	Street level / Rooftop	Integrated with 90° scanning	500Mbps TDD	1.8Gbps TDD	2x 1G Base-T + 1xSFP	15	26	IEEE 802.1d transparent bridging, VLAN & VLAN stacking. Security: SSID/PW, 128-bit AES encryption, managed ID TU Provisioning: auto- and /or IP-less-User / traffic isolation; Port lock / unlock 802.1x LLDP - Link Layer Discovery Protocol
MH-T200-CNN (TU) MH-T201-CNN (cTU)					100Mbps TDD	1Gbps TDD	1x 1G Base-T	15	None	
MH-T200-CCS (TU)					100Mbps TDD	1Gbps TDD	2x 1G Base-T + 1xSFP	15	26	
MH-T200-CCC (TU)					100Mbps TDD	1Gbps TDD	3x 1G Base-T	15	26+13	
MH-T280 (LR TU) (Terragraph cert.)	57-66GHz License-exempt	PtP, PtMP, L2 SDN mesh	Street level / Rooftop	36dBi (.5ft), 42dBi (1ft), 50dBi (2ft)	3800Gbps TDD		1x 5/2.5/1G Base-T, 1x 1G Base-T, 1x SFP+	27	63	IEEE 802.1d transparent bridging, VLAN & VLAN stacking. L2 SDN Mesh. Security: SSID/PW, 128-bit AES encryption, IP-less TU, TLS.
MH-T265 (TU) (Terragraph cert.)		Point to Multi Point (PtMP), L2 SDN mesh		Integrated, with 90° scanning	3800Gbps TDD		1x 2.5/1G Base-T, 1x 1G Base-T, 1x SFP+	27	63	
MH-T260 (TU) (Terragraph cert.)					1000Gbps TDD		1x 1G Base-T	13	None	
MH-N366 (node) (Terragraph cert.)					Integrated, with 360° scanning (4x90°)		3800Gbps TDD / sector 16Gbps / node	1x 10/5/2.5/1G Base-T, 1x 1G Base-T, 1x SFP+	55	
EH-600T/TX EH-614TX	57-68GHz License-exempt	Point to Point	Rooftop / Tower	38dBi (.5ft), 43dBi (1ft), 46dBi (1ft), 50dBi (2ft)	Integrated - 36dBi (0.5ft)	500Mbps TDD	1Gbps TDD	3x 1G Base-T	26	IEEE 802.1d transparent bridging, VLAN & VLAN stacking. Jumbo frames. Configurable QoS-aware forwarding. 8 level QoS with multi mapping options: L2 (802.1p) or L3 (DSCP codes). Link state propagation. LLDP - Link Layer Discovery Protocol. ExtendMM™ multi-band * Encryption: AES*. Timing*: SyncE & 1588v2 available with T and F series (not TX/FX). G.8032 Ethernet Ring Protection*. Not applicable to EH-8010: Ethernet OAM and CFM*. Smart Pipes Port Mode or LAG with LACP.
EH-710T/TX	70GHz Licensed / Lightly-licensed				700Mbps TDD	1Gbps TDD	2x 1G Base-T+2x 1GSFP			
EH-1200T/TX	70/80GHz Licensed / Lightly-licensed				1Gbps FD	1Gbps FD		2x 1G Base-T	40	
EH-1200FX					1Gbps FD	2Gbps FD	2x 1G Base-T + 2x 1G SFP	45	13*	
EH-2500F/FX					2Gbps FD	10Gbps FD	1x combo 10G SFP+/ Base-T + 1x 1G Base-T	50	None	
EH-8010FX										

MultiHaul™: Node – L2 SDN mesh unit; BU – Base Unit; TU - Terminal Unit | FD - Full Duplex | TDD – Time Division Duplexing | Power: PoE-out power to be added, when in use. *Feature subject to software license; or Maximum rate subject to software license.