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MultiHaul™ PtP 60GHz Radio Link Datasheet

Gigabit-in-a-Box with a Dynamic Auto-Aligning Point-to-Point Radio Link

MultiHaul™ PtP is a gigabit radio link operating over congestion-free millimeter waves. It brings the advantages of mmWave – gigabit capacity, immunity to interference and always-on reliability - to a cost-effective small form factor PtP solution. MultiHaul™ PtP is a plug & play system designed for easy deployments, taking advantage of patent-pending scanning antennas that auto-align focused beams, and enables Gigabit connectivity at up to 400 meters range, as well as robust planning and management tools.

A Wide Range of Applications

- Video Security
- Smart/Safe Cities
- Public Wifi BackHaul
- Enterprise Backhaul

Ready Set Go: Gigabit-in-a-Box

The plug and play system is designed for an easy one person installation. The 2 units in the box are factory configured to auto-align and auto-connect, 15 minutes or less to have 1000Mbps in the air. The patent-pending scanning antenna automatically aligns the link, tolerating pole sway due to high-wind or extreme temperatures, without any impact on performance.

Fiber Quality with Wireless Flexibility

Siklu's millimeter wave radios successfully combine the capacity of fiber with the flexibility, speed of deployment and low TCO of wireless networks. That's what makes them the world's best-selling millimeter wave radios every year since 2011. Siklu's portfolio of mmWave solutions provides rock solid performance, even under severe weather conditions, in thousands of networks around the globe.

Secure and Physically Immune Narrow Beams

MultiHaul™ PtP radios operate over the millimeter wave spectrum using narrow beams. This confers several advantages including virtually zero interference and immunity from network jamming. In contrast to wide-beam wireless systems that need to use multiple strategies to perform in dense areas, and are not successful 100% of the time, MultiHaul™ PtP is inherently interference-free and secure under any circumstances. The product is also able to support multiple subscribers and services on a single link- these can be connected with complete isolation based on physical port or VLAN ID.

Always-On Mission Critical Networks

When you cannot afford to lose a video stream, critical safe city sensor data or any other mission critical data, you need to use a wireless network that's as reliable and secure as fiber. With maximal immunity to interference and hacker-proof links with embedded AES encryption, MultiHaul™ delivers a network you can count on.

An Ocean of Spectrum

The MultiHaul™ PtP takes advantage of the large swath of millimeter wave spectrum and wide channels in order to bring Gigabit capacity to a 60GHz PtP link. With narrow beams and other features the MPL400 supports an extremely high reuse factor, even in dense urban areas and challenging deployment scenarios.

Very Large Scale Planning and Optimization

MultiHaul™ is available with robust network planning and optimization tools that help system integrators and large operators scale their networks fast and with low overhead.

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MultiHaul™ PtP 60GHz Radio Link Specifications

The main specifications of the MultiHaul™ PtP radio bundle links are outlined in the following table.

		MPL-400-CCC	MPL-400-CNN	MPL-400-CCS
Topologies	Point to Point, Hub & spoke, Daisy Chain	√	√	√
Easy to install with built-in electronically steered antenna array	Horizontal scanning: 90° Vertical beam-width: 20°	√	√	√
Frequency & Duplexing	57-64GHz	√	√	√
Channels & Width	2 non-overlapping channels, 2160MHz wide	√	√	√
Modulation & Coding	9 level of adaptive coding and modulation	√	√	√
Throughput	Max capacity (Mbps), 1000Mbps any direction	√	√	√
System Gain (link budget)	128.5dB (including antenna gain)	√	√	√
Typical Reach	900-1300ft. (280-400m). Detailed performance calculations - see Siklu's online link budget calculator: siklu.com/toolsetherhaul_lbc/	√	√	√
Interfaces	Local side, BU: 2x RJ-45 100/1000 Base-T & one 1G/2.5G SFP	√	√	√
	Remote side, TU: up to 3x RJ-45 100/1000 Base-T + up to 1 SFP 1GbE	1+0	3+0	2+1
Touch-free Easy Startup	Auto-align, Link Up out-of-the-box	√	√	√
Ethernet Features	IEEE 802.1d transparent bridging Provider bridge - VLAN & VLAN stacking Jumbo frames; Port isolation; TU isolation; LLDP	√	√	√
Security	AES 128-bits	√	√	√
Management & Provisioning	Remote auto-provisioning; In-band, out-of-band management Web GUI (one-click configuration of local and remote units) & Embedded CLI; SNMPv2/3, TACACS+, RADIUS	√	√	√
Conformance	Radio: US FCC 47 CFR Part 15.255; Japan Radio Equipment Certification Ordinance 2-1-19-4-2. EMC: US FCC 47 CFR Part 15; EN 301 489 Safety: UL 60950	√	√	√
Power Supply	PoE, 10W (IEEE 802.3af) without PoE-Out, 55W with PoE-Out (IEEE 802.3at+)	√	√	√
PoE-Out	Local side, BU: ETH2: 26W (802.3at) Remote side, TU: ETH2: 26W (802.3at), ETH3: 13W (802.3af)	√ -	√ Eth2&3	√ Eth2
Environmental	Operating Temperature: -27°F ÷ 131°F (-33°C ÷ 55°C); Optional -49°F ÷ 131°F(-45°C ÷ 55°C) Ingress Protection Rating: IP67	√	√	√
Dimensions (HxWxD)	Each unit, BU or TU: 7.5 x 5.2 x 3.5 in.	√	√	√
Weight	Per side, 3 lbs. (including mounting kit	√	√	√

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