MULTIHAUL™ PTMP 60GHZ RADIO DATASHEET

Multi-Gigabit Throughput in an Always-On Point-to-Multipoint Radio

MultiHaul™ is a PTMP multi-gigabit radio operating over millimeter waves. It brings the advantages of mmW – multi-gigabit capacity, immunity to interference and always-on reliability - to a cost-effective small form factor PTMP solution. MultiHaul™ is a plug & play system designed to easily scale, taking advantage of patent-pending scanning antennas that auto-align links, and enables connectivity for up 8 Terminal Units, as well as robust planning and management tools.

A Wide Range of Applications

- Security / Safe City Networks
- Smart City
- Business Services
- Wi-Fi Backhaul

Secure and Physically Immune Narrow Beams

MultiHaul™ radios operate over the millimeter wave spectrum using narrow beams. This confers several advantages including complete immunity to interference and network jamming, as well as high security. 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™ is inherently interference-free and secure under any circumstances thanks to a unique combination of narrow beams and high frequencies. Multiple subscribers and services can be connected with complete isolation based on physical port, VLAN ID and/or a Terminal Unit.

An Ocean of Spectrum

The MultiHaul™ takes advantage of large millimeter wave spectrum and wide channels in order to bring multi-gigabit 60GHz capacity to a PTMP system with a single Base Unit and up to 8 Terminal Units. With its extremely high reuse factor, the wide spectrum is available anywhere, even in dense urban areas and challenging deployment scenarios.

Ready Set Go

The plug and play system is designed for an easy single person installation. The patent-pending scanning antenna automatically aligns with the Base Units. For buildings with difficult roof-top access, a single base unit needs to be installed on a roof to serve multiple locations. The Base Unit (BU) supports advanced auto-provisioning: Terminal Units (TU) configuration files are stored in the BU to enable early and advanced provisioning. The TU can be located on building sides with no need for internal re-wiring of buildings to achieve net gigabit throughput.

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.

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.

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. They provide rock solid performance, even under severe weather conditions, in thousands of networks around the globe.

MULTIHAUL™ PTMP 60GHZ RADIO LINK SPECIFICATIONS

		BU MH-B100-CCS	TU MH-T200-CCC	TU MH-T200-CCS	TU MH-T200-CNN
Topologies	Point to Multi-point, Point to Point	✓	✓	✓	✓
Frequency / Duplexing	57-64GHz	✓	✓	✓	✓
Channel Bandwidth, Modulation & Adaptive Coding	2 non-overlapping channels, 2160MHz wide, BPSK÷QPSK	✓	✓	✓	✓
	9 level of adaptive coding and modulation	✓	✓	✓	✓
Line Rate / Throughput	Max capacity (Mbps), (with capacity license)	1800	1000	1000	1000
	Line rate up to (Mbps)	2300	2300	2300	2300
System Gain	128.5dB (including antenna gain)	✓	✓	✓	✓
Antenna Options	Horizontal scanning: 90° Vertical beam-width: 20°	✓	✓	✓	✓
Interfaces	Up to 3x RJ-45 100/1000 Base-T	—		—	
	2x RJ-45 100/1000Base-T + 1x SFP (supports 1GbE & 2.5GbE)	✓ (SFP 1 & 2.5GbE)	3	✓ (SFP 1GbE)	1
Terminal Units (TU)	Up to 8 Terminal Units	✓	—	—	—
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	TU auto-provisioning; In-band, out-of-band management Web GUI (one-click configuration of local and remote units) & Embedded CLI; SNMPv2/3, TACACS+, RADIUS	✓	✓	✓	✓
PoE-Out	ETH2: 26W, 802.3at	✓ (SFP)	✓	✓ (SFP)	—
	ETH3: 13W, 802.3af		✓		—
Power Supply	PoE, 15W (IEEE 802.3af) without PoE-Out, 55W with PoE-Out (IEEE 802.3at+)	✓	✓	✓	✓
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: EN 62368-1 and 60950	✓	✓	✓	✓
Environmental	Operating Temperature: -27°F ÷ 131°F (-33°C ÷ 55°C); Ingress Protection Rating: IP67	✓	✓	✓	✓
Dimensions	7.5 x 5.2 x 3.5 in (19x14.5x6.3cm)	✓	✓	✓	✓
Weight	3 lbs. / 1.4 Kg (including mounting kit)	✓	✓	✓	✓

[1] Actual throughput varies with traffic patterns to/from the Terminal Units

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