MULTIHAUL™ TG TERMINAL UNIT T265

Service Options in Terragraph deployments

The MultiHaul™ TG system marks the release of Siklu's 3rd generation point to multipoint 60GHz products, this one with Terragraph certification. The TG network solution consists of Nodes operating over millimetre waves in a redundant mesh topology which also connect to Terminal Units (TU). The T265 communicates to the N366 TG Distribution node using the TG protocol, acting as an end point in a fully meshed MH TG topology. The T265 is Siklu's first TG TU and incorporates several features from our standard MH TU. The T265 offers up to 3 ports with both copper and fiber interfaces as well as a PoE out port to power third party devices such as video cameras.

A Wide Range of Applications

- Fixed 5G Wireless Access, Gigabit to the Home, the MDU and the Enterprise

- Wi-Fi Hotspot Backhaul

- Security / Safe City Networks

- Smart City Business Services, Municipal networks

- Small Cell Backhaul

- Fiber hand-off

Capacity and Flexibility for Demanding Applications

The MultiHaul™ TG Terminal Units operate over the millimetre wave spectrum using self-aligned, dynamic beam steering RF. This confers several advantages including multi-gigabit capacity in dense deployments. With 3 ports, RJ-45 up to 2.5GE or fiber up to 10Gbps, a multitude of service deliveries and interfaces can be realized to meet the need of any demanding application.

Always-On Mission Critical Networks

When you can't afford to lose a video stream, critical safe city sensor data or any other mission critical data, you need 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™ TG delivers a network you can count on. With the mesh topology there are built in redundant paths for traffic if an outage occurs in a given link.

Simple Integrated Future-safe Terminal Unit

Wireless infrastructure should be simple, and future proof. Organizations want to quickly deploy a single box across the target neighbourhood, knowing that they have options to meet the interface requirements of any application. With a built-in software configured ethernet switch, PoE out up to 65W for collocated CPEs, cameras or other devices, plus fiber termination, the T265 Unit can address all your applications.

Fiber Quality with Wireless Flexibility

Siklu's millimetre wave radios successfully combine the capacity of fiber with the flexibility, speed of deployment and low TCO of wireless networks. That is what makes them the world's best-selling millimetre wave radios every year since 2011. They provide rock solid performance, even in very dense networks or under severe weather conditions, in thousands of networks around the globe.

Highly Secure and Physically Immune Beams

The narrow beamwidth confers several advantages including immunity to interference and network jamming. In contrast to wide-beam wireless systems that need to use multiple strategies to perform in dense areas. Multiple subscribers and services can be connected with complete isolation based on physical port, VLAN ID and/or a Terminal Unit.

Ready Set Go

The plug and play TU is designed for an easy single person installation. The patent-pending scanning antennas automatically aligns with serving Node(s).

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60GHz Terminal Unit Radio - specifications

The main specifications of the MultiHaul™ TG T265 units are outlined in the following table.

Topologies	Point to Point, Point to Multi-point.
Frequency / Duplexing	57-66GHz, TDD/TDMA. 4 channels.
Channels & Width	2160MHz, BPSK to QAM16, up to 10 levels of hitless adaptive bandwidth, coding and modulation – boost gain by over 29dB.
Line Rate / Throughput	OTA up to 4,600 Mbps, Throughput up to 1000 Mbps.
System Gain	110dB (Node to TU, including antenna gain).
Self-alignment scanning	Horizontal scanning: 90°, Vertical scanning: 50°.
Interfaces	T265-CCP, 3 ports: 1x RJ-45 2.5/1GbE with PoE-In, 1x RJ-45 1GbE with PoE-Out (35W), 1x SFP+ 10GbE. T265-CNN, 1 port: 1x RJ-45 2.5/1GbE with PoE-In.
Ethernet Features	IEEE 802.1d transparent bridging, Provider bridge - VLAN & VLAN stacking.
Security	AES 128-bits OTA, GUI over HTTPS, CLI over SSH.
Synchronization	To N366
Management & Provisioning	In-band, Out-of-band management, Web GUI (one-pane configuration of local and remote units) & Embedded CLI, NETCONF.
PoE-Out	1 port, 55W POE-Out (IEEE 802.3bt)
Power Supply	All T265 models: PoE-In (IEEE 802.3bt or passive), or 48V DC (via RJ-45 adaptor) 35W no POE-Out, T265-CCP: 90W with 55W POE-Out.
Conformance	Radio: US FCC 47 CFR Part 15.255; EN 302 567, EMC: US FCC 47 CFR Part 15; EN 301 489, Safety: UL/IEC 62368-1; UL/IEC 60950-22.
Terragraph	Terragraph certified.
Environmental	Operating Temperature: -49° ÷ +131°F (-45° ÷ +55°C); Ingress Protection Rating: IP67.
Dimensions	6.9 x 8.6 x 4.9 in. / 175 x 220 x 125 mm. (W x H x D).
Weight	4.84 lbs. / 2.2 Kg.

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