



MULTIHAUL™ TG TERMINAL UNIT T265

Multipoint 90° Beamforming Terragraph Terminal

The MultiHaul™ TG system marks the release of Siklu-by-Ceragon's third generation point-to-multipoint 60GHz products, this one with Terragraph certification. The TG network solution consists of nodes operating over millimeter waves in a redundant mesh topology which also connect to Terminal Units (TU). The T265 communicates to the N367/N265/N892 TG Distribution Node using the TG protocol, acting as an end point in a fully meshed MH TG topology. 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. The MH-T261 is available for single port applications.

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 millimeter wave spectrum using self-aligned, dynamic beam steering RF. This provides 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 needs of any demanding application.

Always-On Mission Critical Networks

In a world of mission-critical data, connectivity must be absolute. MultiHaul™ TG provides a fiber-like foundation for Safe City sensors and vital video surveillance, hardened by embedded AES encryption to keep links hacker-proof.



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 neighborhood, 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 66W for collocated CPEs, cameras or other devices, plus fiber termination, the T265 can address all your applications.

Fiber Quality with Wireless Flexibility

Siklu-by-Ceragon's millimeter wave radios successfully combine the capacity of fiber with the flexibility, speed of deployment, and low TCO of wireless networks. That is what has made them the world's best-selling millimeter 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 relate to complete isolation based on physical port, VLAN ID and/or a Terminal Unit.

Ready Set Go

The plug-and-play T265 TU is engineered for effortless, single-person installation with no pre-configuration required. Operators simply register the TU remotely at its serving Distribution Node (DN). Once a fresh, out-of-the-box unit is powered up and roughly aligned, its integrated beam-forming antennas take over—automatically precision-aligning the link and inheriting the DN's RF parameters. Furthermore, the T265 can be fully managed remotely via the serving DN without the need for a mandatory IP address, significantly streamlining both initial commissioning and ongoing operations.





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60GHz Terminal Unit Radio – Specifications

Topologies	Point-to-Multipoint	
Frequency & Duplexing	57-66 GHz, TDD/TDMA, with 4 channels	
Channel Bandwidth, Modulation & Coding, ATPC	2,160MHz, BPSK to 16 QAM, up to 10 levels of hitless adaptive coding and modulation – boost gain by over 29dB Automatic Transmit Power Control (ATPC), per link	
Radio OTA Rate (over the air) / Throughput	OTA up to 4,600 Mbps Throughput ≤ 1,900 Mbps full duplex	
System Gain (link budget)	110dB (Node to TU, including antenna gain). Please refer to Ceragon’s SmartHaul™ Link Budget Calculator (lbc.ceragpm.com) for radio link performance models.	
Scanning Antenna Coverage	Beamforming Scanning: horizontal 90°, vertical 25°. Mechanical tilt adjustment ±10° with supplied MK; ±60° with optional EH-MK-SM;	
Network synchronization	To Distribution Nodes (N36X / N265 / N880 / N892)	
Interfaces	3 ports: 1x RJ-45 2.5/1GbE with PoE-In, 1x RJ-45 1GbE with PoE-Out, 1x SFP+ 10GbE	
Ethernet Features	IEEE 802.1d transparent bridging; Provider bridge - VLAN & VLAN stacking	
Security	AES 128-bits OTA, GUI over HTTPS, CLI over SSH, file transfer over SSH. IP-less operations.	
Management & Provisioning	In-band, Out-of-band management; Web GUI (one-pane configuration of local and remote units) & Embedded CLI; NETCONF, SNMP	
Terragraph	Terragraph certified	
Conformance	Radio: US FCC 47 CFR Part 15.255; EN 303 722, EMC: US FCC 47 CFR Part 15; EN 301 489, Safety: UL/IEC 62368-1; UL/IEC 60950-22	
PoE-Out	1 port PoE-Out, ≤63W (with AC PoE adapter); ≤66W (with DC PoE adapter); IEEE 802.3bt; Cable loss may affect power delivered to the PD.	
Power Supply	48V DC input power via ETH1, options are direct DC (with optional RJ45 property DC adapter) or PoE-In (IEEE 802.3bt or passive) Available PoE-In adapters: AC (60W or 90W) / DC (up to 95W) Power consumption: without POE-Out ≤27W; with PoE-Out enabled ≤90W (with AC POE-In adapter) / ≤93W (with DC POE-In adapter)	
Environmental	Operating Temperature: -49° ÷ +140°F (-45° ÷ +60°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.	
In the Box	Terminal unit with attached mounting kit, metallic bands, all weather shell, indoor 60W PoE power supply with AC cable, quick start guide	
Ordering Information		
VEHP287	MH-T265-CCP-PoE-MWB	MultiHaul™ TG TU, 90°, 1900Mbps, 2 RJ-45 & 1 SFP+, MK & PoE injector included, IP-67, White
VEHM028	EH-MK-SM	Extended elevation mounting kit up to +60/-45°
VPSU113	AX-IN-10G-90W-AC-PoE	PoE Injector 90W, 10Gbps (100-240V AC source)
VSRG014	AX-SRG-10G-OD	10 GbE Ethernet/PoE Surge Protector (outdoor) 802.3ab/bz/an
VSFP021	AX-SFP+10G-SM	SFP+ 10Gbps SMF, 1310nm, LC connector

