

**Siklu**

**terragraph**  
certified

# The Gigabit Revolution

Gigabit for all takes a giant step forward  
with Siklu's MultiHaul™ TG series



The acronym GTTX means gigabit to the office, the MDU, or even the home. Providing this level of service at a customer friendly price combined with an acceptable ROI requires advances in many aspects of network operations, from design methodologies to self-organizing and optimizing capabilities via automated provisioning and simple deployments. Siklu has developed and enhanced technologies in RF design and wireless network protocols to enable and drive GTTX for all.

With the Terragraph compliant MultiHaul™ TG series, we are lowering the cost of delivering services to homes, businesses and within Smart City Broadband IoT applications. The TG series consists of Distribution Nodes (DNs) and client nodes (TUs). Siklu's N366 is an integrated Terragraph compliant DN that provides 360-degree coverage, is able to self-organize into a neighborhood L2 SDN mesh and provides just under 16Gbps of total capacity. The MultiHaul TU265 acts as a client node with dynamic beam steering connecting to DNs and offers multiple ports for interface to on premise networks via copper or fiber.

With our N366 connecting to other N366 nodes, or to our TU series the MultiHaul TG product line offers the greatest flexibility in delivering gigabit connections in dense environments.

### Key features and benefits include:



#### Mesh Topology

The N366 is deployed as a mesh node, with the built-in self-backhaul connecting to additional N366 devices, TUs or to a network POP. The POP connection can be via ether fiber or our EtherHaul™ PtP links with up to 10Gbps full duplex capacity.

The ability to create multiple self-backhaul links enables diverse traffic routing to support differentiated SLA levels, as well as carrier- grade make-before- break redundancy with sub-50ms traffic switch-over.



#### SaaS

Siklu's advanced SmartHaul™ tools, WiNDE for network design, and ENMS for management both support the MultiHaul TG series. With the advent of Software Defined Network infrastructure, Siklu continues to blend leading hardware platforms with our system of software.

Applications focused on reducing the Total Cost of Ownership, adding our Runner for centralized and automated operations of the L2 SDN mesh network. All of Siklu's SmartHaul™ software systems can be Cloud based or premise located.



#### Flexible and Powerful

Deployment options and requirements are almost endless. Each network may have critical sites that require redundant connectivity, or perhaps multiple ports with optional PoE-Out, or a fiber handoff from the Node or TU. You may need full 360° coverage or maybe just 90°. Maybe you need a compact CPE, or one with extended range. Siklu understands these realities after working with service providers and telecom organizations of all sizes. This is reflected in our diverse range of Terminal Units, flexible and adaptable to meet the widest range of needs.



#### Self-Organizing, Self-Healing Networks

Siklu's self-organizing protocols tightly integrated with our SmartHaul™ Runner ensure smooth deployments of L2 SDN mesh networks across a neighborhood or an entire city, with no service disruptions from link or N366 node failures.

The L2 SDN mesh network will automatically establish connectivity between all nodes, and reroute traffic based on performance in terms of capacity, oversubscription and even latency to determine the best paths. In addition, Runner provides on-going, dynamic optimization in response to changing traffic patterns and RF link quality.



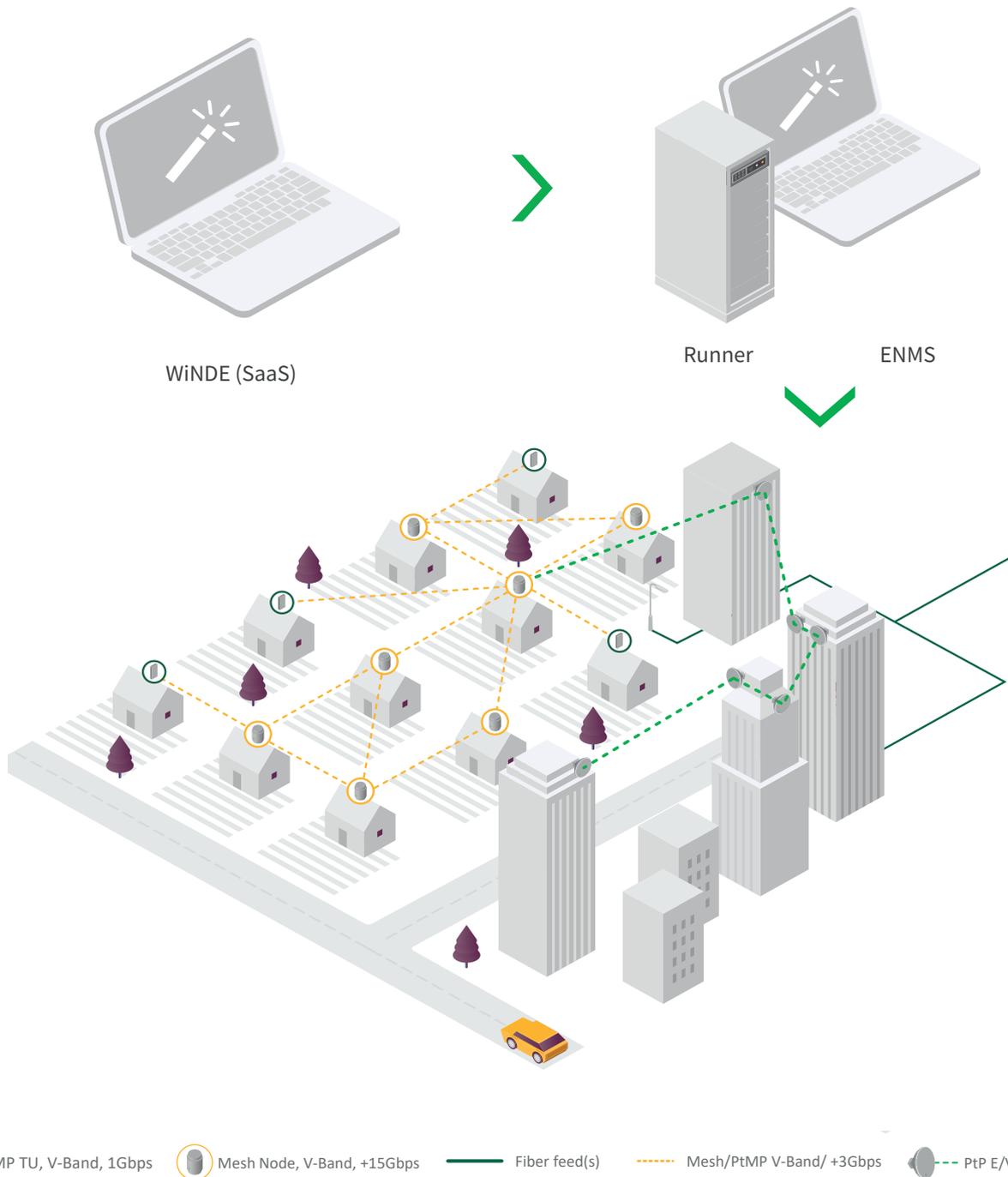
#### Rapid and simple deployment

Combining the advanced self-organizing centralized controls and provisioning with superior automatic beam steering means installations can be done quickly and with minimal skillsets.

If the units can "see" each other, they automatically connect, installation is a matter of physical mounting and providing power. That's it.

The MultiHaul TG products continue to support critical features customers have come to rely on. With 1/2.5/5/10GE, copper or fiber option ports, the N366 and the TU265 provide maximum flexibility when integrating into existing networks, be they fiber or wireless. Siklu remains committed to delivering not only fast but also secure networks. Supporting VLAN and QinQ, AES, 802.1x and other hardening features, service providers can be assured their network is protected and customers can be confident their data is safe.

Siklu continues to be the leader in mmWave systems, offering the broadest portfolio of mmWave in the market, PTP (EtherHaul™), PtMP (MultiHaul™) and now mesh products (MultiHaul™ TG). Deploying Gigabit connections to customers is not a one size fits all scenario. At Siklu we understand this and with the MultiHaul TG series we continue to provide solutions that deliver robust and sustainable ROIs to service providers and smart cities across the globe.



PtMP TU, V-Band, 1Gbps
  Mesh Node, V-Band, +15Gbps
  Fiber feed(s)
  Mesh/PtMP V-Band/ +3Gbps
  PtP E/V-Band 1-10Gbps FD

