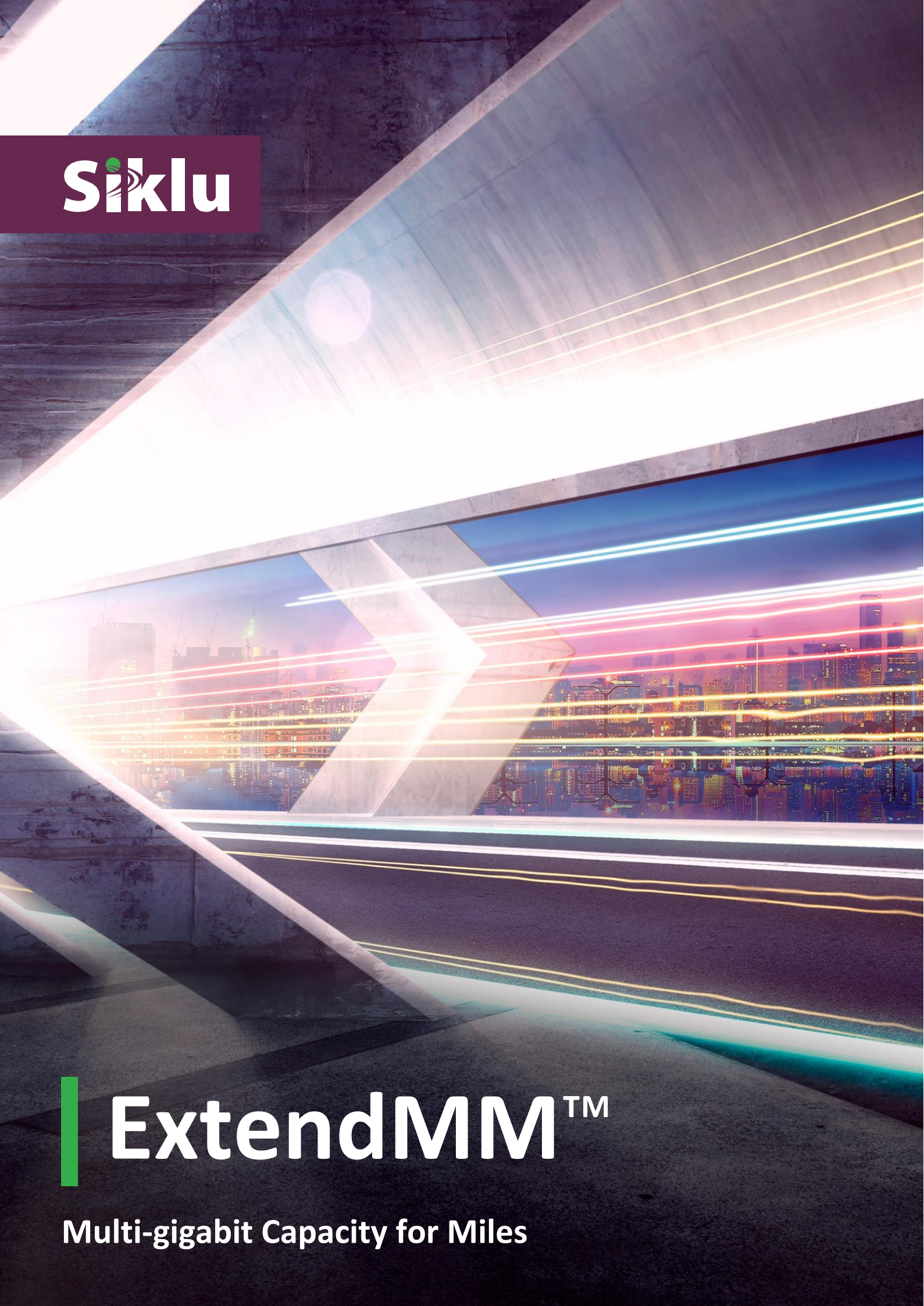

ExtendMM™

Multi-gigabit Capacity for Miles

Introduction

Delivering multi-gigabit mmWave capacity more than a few miles has seemed impossible until now. Approaches used so far often included sacrificing availability or adding parallel links with huge cost increases and multiplying the complexity of the installation. To address these challenges and deliver multi-gigabit connections up to 6 miles (10km) or more Siklu offers ExtendMM™. ExtendMM™ is a high-capacity and long-range solution that consists of multi-gigabit EtherHaul™ Kilo radios, with enhanced software, built-in switch, a dual-band 2ft 70/80GHz & 5Ghz antenna, backed by SmartHaul™ Apps (LBC & WiNDE). One or more of these elements can be implemented a-la-carte, however when all are used together, Siklu's ExtendMM™ solution delivers simple, cost effective, long-range multi-gigabit connections.

Using Siklu EtherHaul™ Kilo radios with a lower band radio (for example: 5GHz) combined via the ExtendMM™ software, dual-band 2ft antenna and other accessories from Siklu is all that it takes to go 10Gb to 6mi (10Km) and more, with 99.999% availability, using lightly licensed spectrum. With a single click it becomes possible to turn an EtherHaul™ Kilo product into a long-range link that delivers the capacity your network is demanding.

What is ExtendMM™ and what does it offer?

ExtendMM™ is a complete 10Gbps @ 10Km solution comprised of:

- Integrated and easy to use, single click configuration, monitoring and control.
- A powerful integrated networking engine.
- Built in switch means running a single cable to the combined dual-link solution.
- Siklu's 2ft dual-band 70/80GHz & 5GHz antenna supports any 5GHz radio with external antenna.
- SmartHaul™ Apps, LBC & WiNDE, to support link performance review and network design

Why Siklu's ExtendMM™?

The E-Band spectrum is well suited for multi gigabit capacity applications with rain being the principal impediment affecting range. While light rain affects link performance marginally, heavy rain can degrade link performance significantly. The greater the distance of the link, the greater the degree of attenuation.

Leveraging inexpensive lower capacity, less sensitive frequency bands such as 5GHz solutions and combining them with the EtherHaul™ Kilo product family delivers the best of both technologies – high capacity and long range, at an unbeatable $/Gb.

How does Siklu's ExtendMM™ work?

Siklu's ExtendMM™ combines EtherHaul™ millimeter wave radios with a secondary radio operating in a lower frequency to create a high-availability, all-weather, long range connection. A single click in the EtherHaul™ management GUI turns the two radios into a fully-monitored high-performance long-distance multi-gigabit unified link.

Multiple Gbps will be available over the interference-free mmWave EtherHaul™ link, while the backup link is in stand-by mode, monitored by the Siklu radio, ready to be activated for the rare occasions during the year when the mmWave link is not available due to weather conditions.

Adaptive modulation and advanced QoS

When a significant rain event occurs, the adaptive capabilities of the EtherHaul™ are activated, lowering the capacity to improve the link budget and maintain the mmWave link. If the EtherHaul™ capacity reaches a user configured low threshold, traffic is forwarded to the lower frequency radio by the built-in EtherHaul™ advanced QoS engine, to maintain the availability of high priority traffic, and pass other traffic based on available capacity. Switching the traffic to the secondary radio is achieved hitlessly by the EtherHaul™ integrated networking engine. When the rain cell has moved on, and the EtherHaul™ link can restore capacity to a higher level than the configured threshold, the traffic is routed back to the EtherHaul™ radio with no loss of traffic.

Minimum Requirements from your backup radio

Siklu's ExtendMM™ solution operates with any wireless PtP product which supports the Ethernet transparent-bridge mode and that can transport any type of layer 2 broadcast or multicast traffic.

www.siklu.com | hello@siklu.com
Copyright © 2019 Siklu Communication Ltd. All Rights Reserved