

Value Bytes

1-2Gbps capacity within limited MW spectrum


 Only with IP-20 multicore technology

The challenge

Your 4G network must evolve to support advanced services, such as HD video streaming and other services, which require huge network capacity expansion. Your access network wireless backhaul infrastructure must be able to deliver capacities beyond 1Gbps, yet your current narrowband microwave spectrum is limited. You can only deliver up to 500Mbps over wireless backhaul links -- less than half your capacity needs.

How do you plan your wireless backhaul network to meet the demand for capacity growth on such a scale?

Using the new E-band spectrum (71GHz-86GHz) allows you to leverage wideband channels (250-500MHz). However, E-band will not be suitable for medium-long suburban/rural aggregation links, since it is only available for short-distance metro networks scenarios.

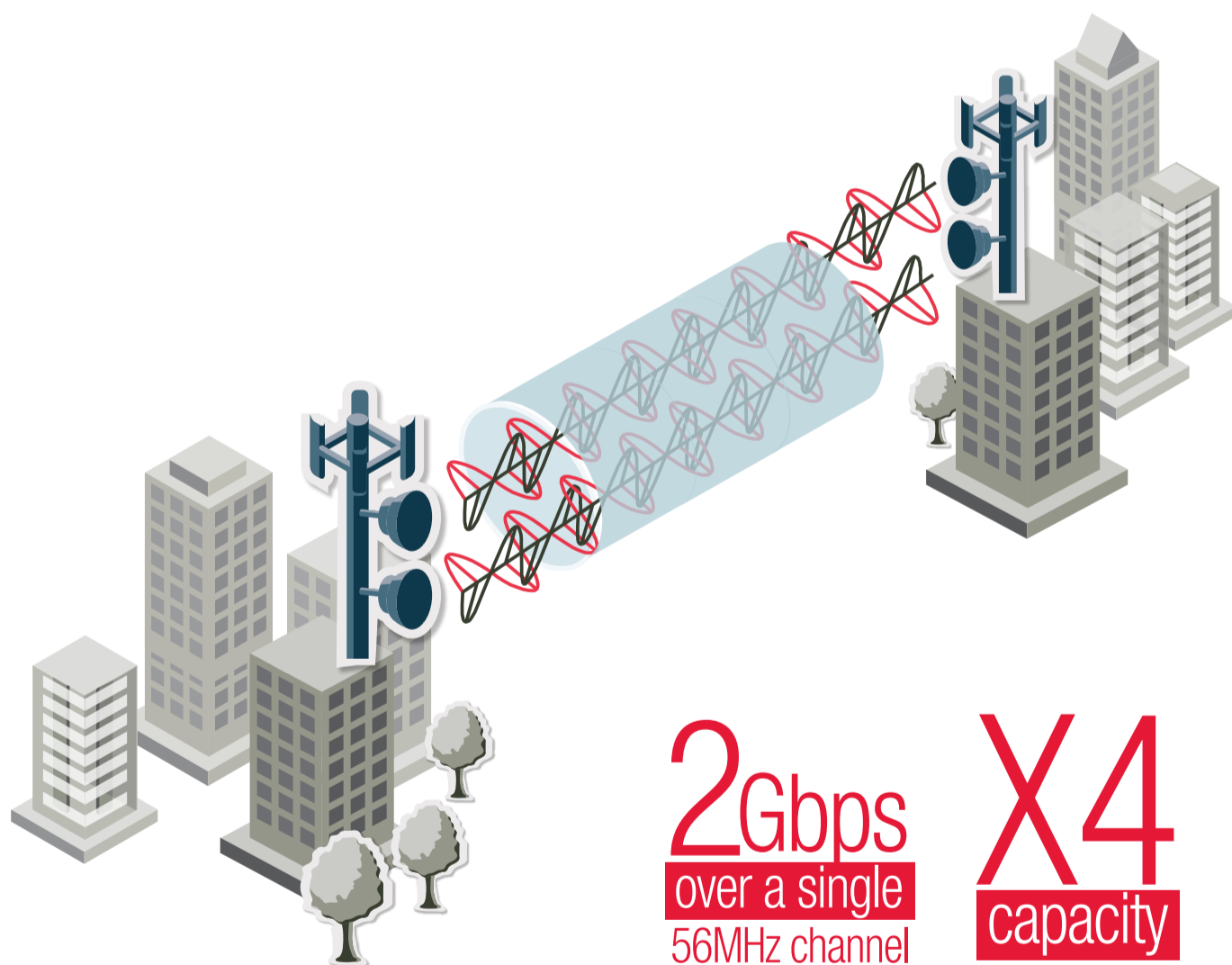
The IP-20 platform: leverage spectrum for 4.5G/5G

Ceragon's IP-20 platform provides a simple way to leverage current narrowband backhaul spectrum to support your organization's evolution to a 4.5G and 5G digital world. Employing proprietary LoS 4x4 MIMO techniques, the IP-20 delivers X4 the capacity per single microwave channel -- effectively increasing throughput over a single 56MHz channel to as much as 2Gbps radio capacity.

For example, by deploying 2 of Ceragon's IP-20C multi-core radios with 2 small antennas at each end of the link, LoS 4x4 MIMO technology provides 1Gbps radio capacity over a single 28MHz channel, or 2Gbps radio capacity over a 56MHz channel -- at any band within the 6-42GHz microwave spectrum.

- No header compression or "accelerator"
- No hidden assumptions
- Pure net radio capacity that you can rely on

LoS MIMO 4x4 can also provide an additional 3dB of system gain to links, allowing you to deploy longer links or use smaller antennas, both of which improve your network's operational efficiency.



Why Ceragon?

Ceragon's exclusive LoS 4x4 MIMO technology delivers what you need to support your 4.5G/5G network evolution: multi-Gbps capacity, with minimal use of existing microwave spectrum (6-42GHz).