



LigoWave

LigoPTP 5-N RapidFire

TEST REPORT

Mexico

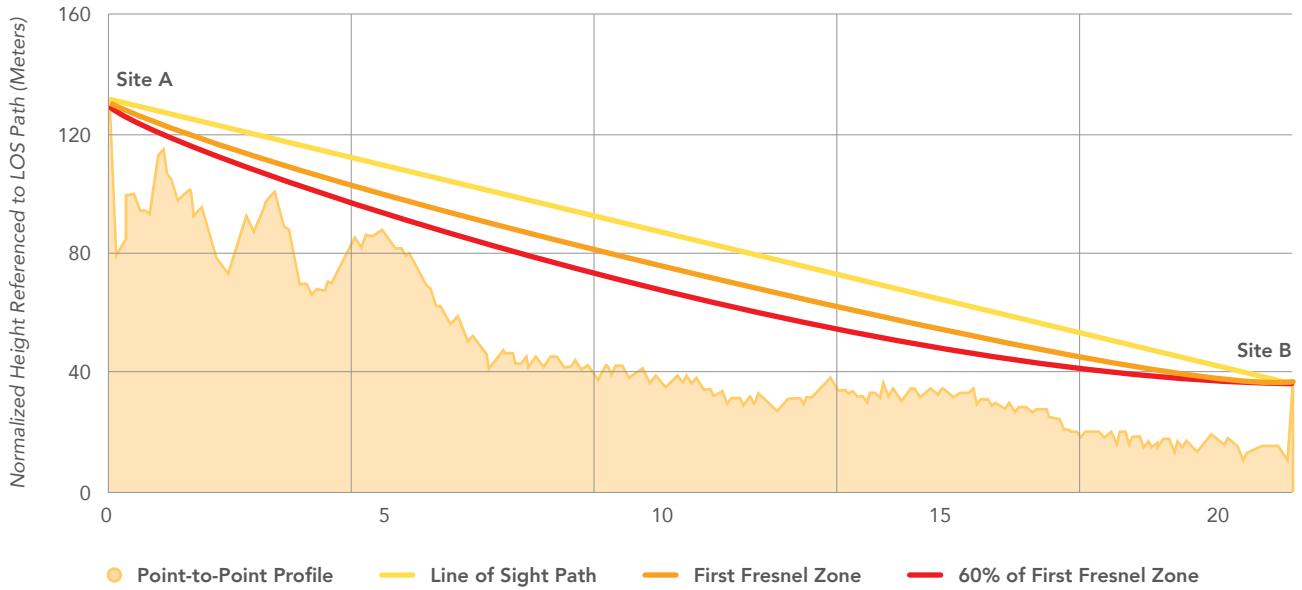


24 km (14.9 mi) link test in Mexico

PacificNet - LigoWave's distributor in Mexico has installed a beta test link with the civil association of agricultural producers (AUPA EL GRANDE A.C.), who are responsible for modernization of the local farms. The purpose of the link was to provide Internet service connectivity that was not available on the farms before.



Path profile between TX and RX sites



Equipment: LigoPTP RapidFire 5-N
Antenna: 30 dBi directional dual-pol dishes
Height (AGL): 24 m (78.7 ft)

Link stats

The screenshot shows the LigoWave GUI for a LigoPTP 5-N RapidFire device. The top navigation bar includes the LigoWave logo and various icons. The status bar shows "Configuration saved" and "Link quality (82%)". The main information section is divided into three tabs: General, Radio, and Network.

General Information:

- Product name: LigoPTP 5-N RapidFire
- Serial number: D91E1618000089C
- Firmware version: PTP-MA-1 V7.53.16912 (Update)
- System uptime: 5 days 7:04:54
- Friendly name: LigoPTP 5-N RapidFire
- Device location: RP Cañadas
- Latitude/Longitude: 0 / 0
- Height AGL: 0

Radio Information:

- Operating mode: MASTER
- Max Tx data rate, Mbps: 866.7 (256-QAM 5/6)
- Frequency, MHz: 5500 (5480-5540)
- Channel width, MHz: 80
- Tx power, dBm: 30
- Antenna gain, dBi: 30
- Noise level, dBm: -95/-95

Link ID: LigoPTP-Rapidlink

Remote device	Link status	Remote site				Local site
		Tx power, dBm	Tx/Rx data rate, Mbps	Noise level, dBm	Signal level, dBm	Signal level, dBm
LigoPTP 5-N RapidFire 09:19:38:95:7E:68	UP 4 min, 51 sec	30	481/582	-95/-95	-65 -68	-64 -67

Network Information:

- IP method: Static
- MAC address: D0:19:3B:05:2E:B0
- IP address: 192.168.10.200
- Subnet mask: 255.255.255.0
- Default gateway: 192.168.10.253
- DNS server 1: 192.168.10.253
- DNS server 2: --
- IPv6 method: Disabled

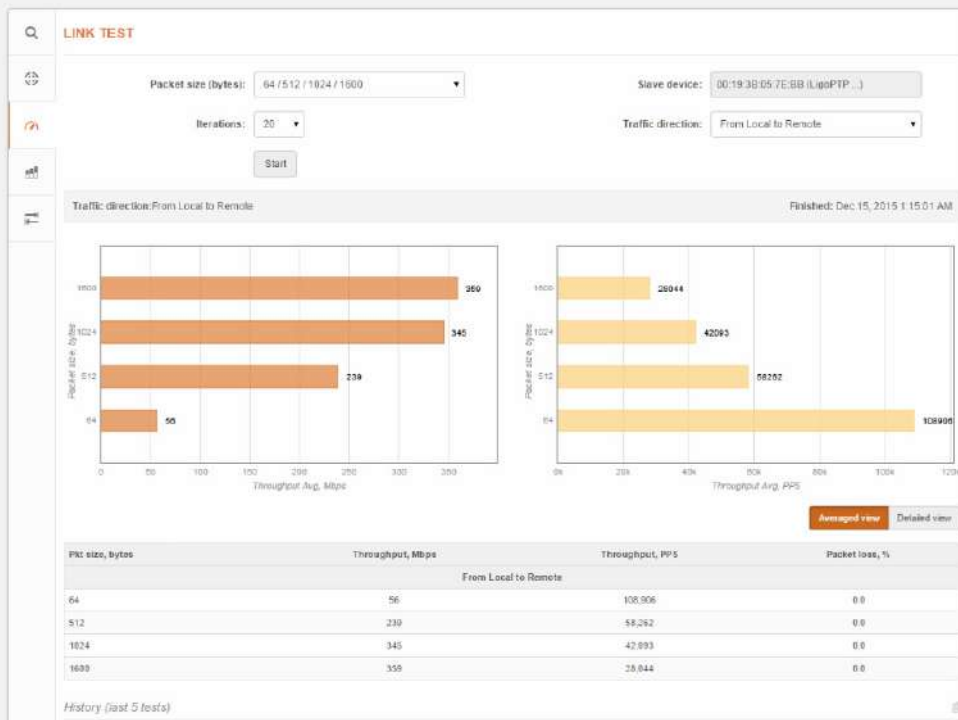
The GUI screenshot above illustrates the main statistical information about the link. The signal level is in the -65 dBm range, which will not allow it to achieve the maximum capacity possible. To improve that, higher gain antennas are necessary.

Spectrum analysis



The spectrum analyzer tool has been improved by adding a waterfall chart. The screenshot above shows a very high interference, which also complicates the communication of the link.

Link test



A screenshot from the link test tool indicates the max capacity of 350 Mbps with 1600 byte packets and a PPS of 108,000 with 64 byte packets.