



LigoWave

LigoPTP RapidFire 5 – N

TEST REPORT

India

LigoPTP RapidFire 5 – N REPORT

Radmax – a wireless internet service provider and LigoWave devices distributor in India has set up a 14,9 km LigoPTP RapidFire 5-N link with external 32 dBi Telimart dish antennas. The client was B.P. Foods, which is a renowned manufacturer, supplier and distributor of wheat products in Gwalior region. Main customer requirements were:

- To provide a backbone link for video surveillance system monitoring the perimeter as well as the functional areas of Malanpur plant premises.
- Transmit video data wirelessly to a central monitoring room situated in the HO Gwalior.
- Run of 19 IP cameras (5 Fixed and 14 PTZ) in the Malanpur plant premises.

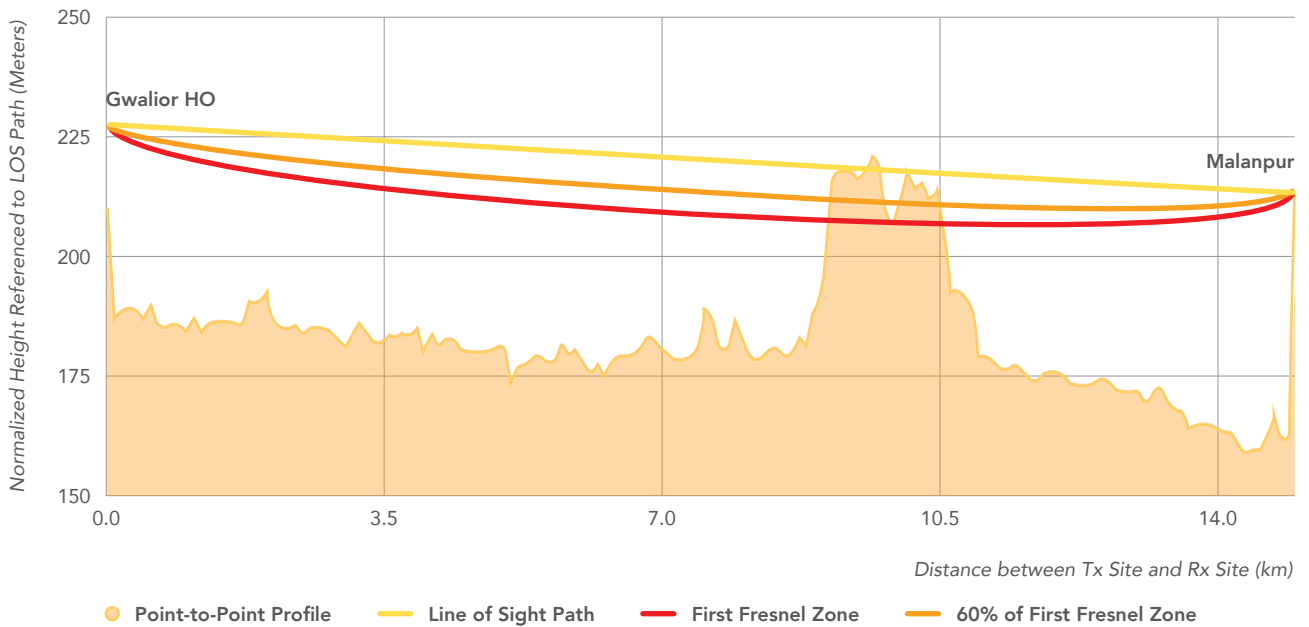
Main challenge:

- Mountainous terrain with a high hill in the way causing no line of site visibility

Equipment used for the link

- LigoPTP RapidFire 5 – N
- 32 dBi Telimart dish Antennas
- Outdoor cable
- Self – supporting towers

Link path profile between TX and RX sites





Picture | Typical landscape

14 km non-los link with LigoPTP RapidFire



Scheme | Wireless link structure



Picture | Site map

ETH1: 100baseT/Full Link quality (33 %)

ETH2: Disconnected

Configuration saved

Password is not set! [Set password](#)

INFORMATION

Product name: LigoPTP 5-N RapidFire
Serial number: 0E1D15450000C3F
Firmware version: FTP.MA-1.v7.53-3.19448 (Update)
System uptime: 1 hour 20 min 7 sec.

Friendly name: LigoPTP 5-N RapidFire
Device location: Location
Latitude/Longitude: 0 / 0
Height AGL, m: 0

Radio

Operating mode: SLAVE
Max Tx data rate, Mbps: 866.7 (256-QAM 5/6)
Frequency, MHz: 5200 (5160-5240)
Channel width, MHz: 80

Tx power, dBm: 31
Antenna gain, dBi: 32
Noise level, dBm: -95/-95

Link ID: LigoPTP

Remote site						Local site
Remote device	Link status	Tx power, dBm	Tx/Rx data rate, Mbps	Noise level, dBm	Signal level, dBm	Signal level, dBm
LigoPTP 5-N RapidFire 00:19:3E:07:B5:60	UP 11 min, 18 sec.	31	201/472	-95/-95	<div style="width: 80%;"></div> -71 <div style="width: 80%;"></div> -73	<div style="width: 80%;"></div> -71 <div style="width: 80%;"></div> -69

Network

Screenshot | Link status page

Traffic direction: From Local to Remote

Finished: Feb 29, 2016 7:28:58 PM

Packet size, bytes	Throughput Avg. Mbps
64	89
512	135
1024	137
1600	106

Packet size, bytes	Throughput Avg. PPS
64	173,840
512	32,843
1024	16,804
1600	8,282

Averaged view Detailed view

Pkt size, bytes	Throughput, Mbps	Throughput, PPS	Packet loss, %
From Local to Remote			
64	89	173,840	0.0
512	135	32,843	0.0
1024	137	16,804	0.0
1600	106	8,282	0.0

History (last 5 tests) 🗑

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Screenshot | Link throughput page

The internal throughput testing tool indicates LigoPTP RapidFire's capacity and PPS rate with different packet sizes. The maximum throughput in this case was 137 Mbps with 1024 byte packets and the max PPS rate was 173,840 with 64 byte packets. The link is using 80 MHz channel.