LigoWave

LigoDLB 6-15ac

CASE STUDY

Russia

Scenario

One of LigoWave's clients from Russia has set up a PTP test link with 2× LigoDLB 6-15ac devices. On one end, a 6-15ac was mounted on an antenna ladder, while on the other—on a private house. The link extended 1.01km over a remote open field. Such a site guaranteed a low-noise setting and high result accuracy.

Product

LigoDLB 6-15ac is a wireless 6GHz bridge made for video surveillance & last-mile scenarios. It comes with a 750MHz QCA 9563 CPU, 64MB RAM/16MB Flash Memory, a 30dBm QCA 9882 radio, and a 15dBi integrated directional panel antenna.

The 6-15ac supports 256-QAM, QoS functionality, and the iPoll 3 protocol. This allows the device to deliver over 500Mbps of throughput & 100,000+ packets per second.

LigoDLB 6-15ac uses the iPoll smart polling protocol to get rid of transmission congestion and close-cluster interference. This effectively reduces latency, stabilizes jitter and increases CPE count to boost throughput and guarantee reliability in noisy settings.

Results

Link signal levels were at –66~–59dBm. The 6-15ac link used the iPoll 3 proprietary protocol. The packet-per-second rate topped 100,000PPS.

Tests over the 20MHz channel width provided optimal results: 120Mbps using TCP and 125Mbps using UDP aggregated duplex. Test results over the 40MHz channel width were 165Mbps using TCP and 220 using UDP aggregated duplex. The 6-15ac reached peak performance over the 80MHz channel width with 254Mbps using TCP and 500Mbps using UDP aggregated duplex.

LigoDLB 6-15ac | 1km Link | 100,000+PPS

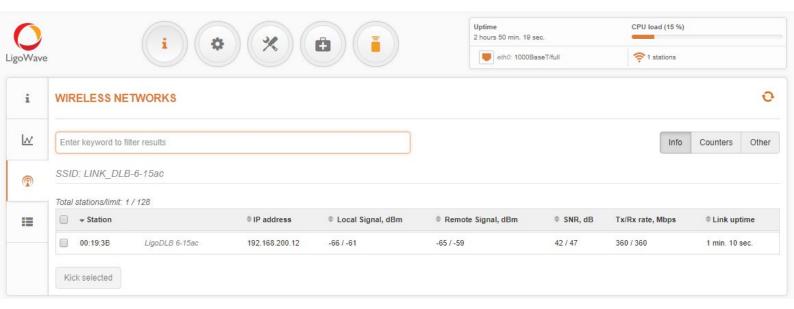
Map | *LigoDLB 6-15ac Link (1.01km)*

LigoWave

Uptime
2 hours 50 min. 19 sec.

CPU load (15 %)

eth0: 1000BaseT/full

1 stations

WIRELESS NETWORKS

Enter keyword to filter results

| Info | Counters | Other |

SSID: LINK_DLB-6-15ac

Total stations/limit: 1 / 128

▼ Station		⇕ IP address	⇕ Local Signal, dBm	⇕ Remote Signal, dBm	⇕ SNR, dB	Tx/Rx rate, Mbps	⇕ Link uptime
☐ 00:19:3B	LigoDLB 6-15ac	192.168.200.12	-66 / -61	-65 / -59	42 / 47	360 / 360	1 min. 10 sec.

Kick selected

Table | *LigoDLB 6-15ac Link*

	20MHz	40MHz	80MHz
TCP Aggregated Duplex (Mbps)	120	165	254
UDP Aggregated Duplex (Mbps)	125	220	500

Table | *Link Performance Results*

PTP Link Simulator

1.01km (link)

— Line of Sight   — 1st Fresnel Zone   ···· 60% Clearance Zone

Contact Us

Need a 6GHz wireless network solution for your projects?
Get in touch: sales@ligowave.com

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