



# LigoDLB 5-20 ac

5GHz High-Capacity Wireless Device

# 500 + Mbps

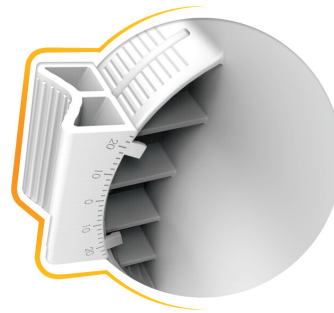
## Incredible performance

500+ Mbps throughput - a result of powerful hardware platform with 802.11ac technology based radio and a proprietary data transmission protocol (iPoll). Incorporating a QCA 9563 CPU (750 MHz), a QCA 9882 radio and 64 MBytes of RAM and 16 MBytes of flash memory, the LigoDLB 5-15 ac series devices are an ideal solution for capacity demanding applications. State of the art RF design with great output power and sensitivity parameters improve range and capacity over highest the modulation - 256 QAM. The 24V Gigabit Ethernet port (passive PoE) allows utilizing the full capacity of the radio when used in a point-to-point or point-to-multipoint network design. LigoDLB ac series devices are backwards compatible with LigoDLB devices using iPoll mode, which helps to expand or upgrade existing networks using the latest technologies over time.



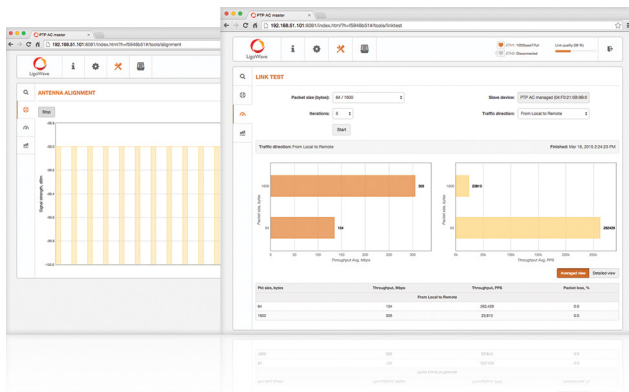
### New form factor

The shape of the enclosure is now smaller, lighter but retains the IP-66 weather protection rating. Smaller packaging reduces freight costs and makes them less obvious. The new design has no metal parts, which makes them lighter and corrosion resistant.



### New mounting

The adjustable mounting bracket is very easy to assemble and install. It consists of two easy to connect parts that allow tilting the device up and down when installing on a pole. A metal strap is included to securely tighten the device. This design includes additional reinforcements and thicker materials to ensure survival in extreme climate conditions.



## Powerful OS

The LigoDLB OS is a highly functional and easy to use operating system embedded in all LigoDLB hardware devices for effortless setup and trouble free operation. High performance (500 Mbps) allows offering more bandwidth together with additional services such as VoIP and IPTV. This is possible when using LigoWave's smart QoS mechanism and multi-cast traffic enhancements for triple play services. Such services are essential for all next generation service providers to complement their existing portfolios. iPoll, LigoWave's proprietary transmission protocol, ensures smooth performance with a high number of clients even in noisy environments.

# Specifications

| Distance Recommendation | PTMP Mode    | PTP Mode     |
|-------------------------|--------------|--------------|
| LigoDLB 5-20ac          | 10km/ 6.21mi | 15km/ 9.32mi |

## Wireless

|                      |  |
|----------------------|--|
| WLAN Standard        | IEEE 802.11a/n/ac, iPoll 3   |
| Radio Mode           | MIMO 2x2   |
| Radio Frequency Band | 5GHz models: 5.150 - 5.850GHz (FCC 5.150 - 5.250 and 5.725 - 5.850GHz)<br>(Country Dependent)  |
| Transmit Power       | Up to 30dBm (Country dependent)  |
| Channel Size         | 5, 10, 20, 40, 80MHz   |
| Modulation Schemes   | 802.11a/n: OFDM (64-QAM, 16-QAM, QPSK, BPSK)<br>802.11ac: OFDM (256-QAM, 64-QAM, 16-QAM, QPSK, BPSK)   |
| Data Rates           | 802.11ac @ 40 MHz: 400, 360, 300, 270, 240, 180, 120, 90, 60, 30Mbps<br>802.11ac @ 80 MHz: 866, 780, 650, 585, 520, 390, 260, 195, 130, 65Mbps |
| Error Correction     | FEC, LDPC  |
| Duplexing Scheme     | Time Division Duplex   |

| 40 MHz | Modulation, Mbps         | 400 | 360 | 300 | 270 | 240 | 180 | 120 | 90  | 60  | 30  |
|--------|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|        | TX Power, dBm            | 26  | 27  | 28  | 29  | 30  | 30  | 30  | 30  | 30  | 30  |
|        | Receive Sensitivity, dBm | -70 | -72 | -76 | -78 | -80 | -84 | -87 | -92 | -94 | -95 |
| 80 MHz | Modulation, Mbps         | 866 | 780 | 650 | 585 | 520 | 390 | 260 | 195 | 130 | 65  |
|        | TX Power, dBm            | 24  | 25  | 25  | 26  | 27  | 28  | 28  | 29  | 29  | 29  |
|        | Receive Sensitivity, dBm | -64 | -66 | -70 | -72 | -74 | -78 | -81 | -85 | -88 | -90 |

## Antenna

|      |   |
|------|---|
| Type | Integrated Dual-Polarized Directional Panel Antenna |
| Gain | 20dBi   |

## Wired

|           |                          |
|-----------|--------------------------|
| Interface | 10/100/1000 Base-T, RJ45 |
|-----------|--------------------------|

## Physical

|            |  |
|------------|--|
| Dimensions | 216mm (8.5 "), 184mm (7.2 "), 80mm (3.1 ") |
| Weight     | 413g (0.91lb)                              |
| Mounting   | Pole mounting bracket included             |

## Power

|                       |  |
|-----------------------|--|
| Power Supply          | 24 VDC passive PoE (AC to 24 VDC adapter is included in the package) |
| Power Source          | 100 – 240VAC   |
| Max Power Consumption | 10W  |

## Environmental

|                       |                                |
|-----------------------|--------------------------------|
| Operating temperature | -40°C (-40°F) ~ +65°C (+149°F) |
| Humidity              | 0 ~ 90 % (Non-Condensing)      |

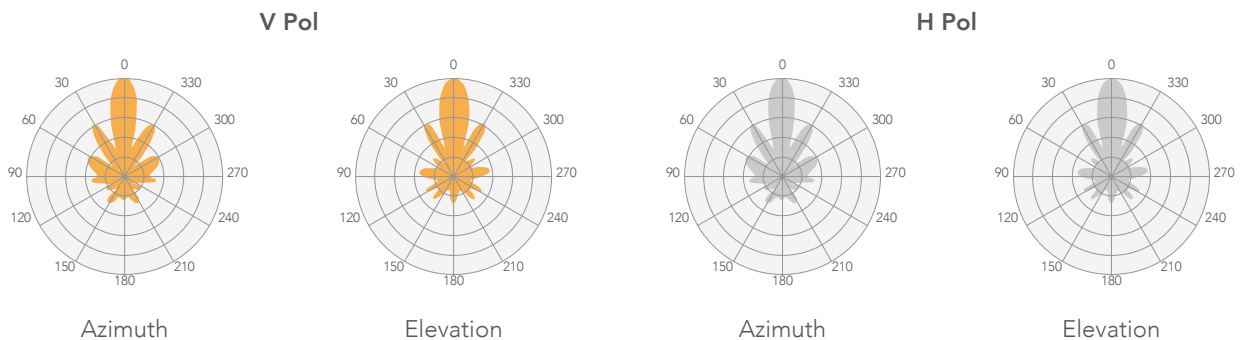
## Management

|                   |                               |
|-------------------|-------------------------------|
| System Monitoring | SNMP v3, Syslog, Web UI, WNMS |
| Configuration     | WebUI, WNMS                   |

## Regulatory

|               |          |
|---------------|----------|
| Certification | FCC/IC/C |
|---------------|----------|

## Antenna specifications



|                           |              |
|---------------------------|--------------|
| Frequency Range           | 5.1 - 5.9GHz |
| Gain                      | 20dBi        |
| Polarization              | Dual Linear  |
| Cross-Pol Isolation       | 27dBi        |
| VSWR                      | <1.8         |
| Azimuth Beamwidth (H pol) | 16deg        |
| Azimuth Beamwidth (V pol) | 16deg        |
| Elevation Beamwidth       | 16deg        |



LigoWave

[www.ligowave.com](http://www.ligowave.com)

## LigoDLB 5-20ac

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