



# LigoDLB 5-90 ac

5GHz Base Station with Integrated Antenna



# Incredible performance

500+ Mbps throughput - a result of powerful hardware platform with 802.11ac technology based radio and a proprietary data transmission protocol (iPoll 3). Incorporating a QCA 9563 CPU (750MHz), a QCA 9882 radio and 64MBytes of RAM and 16 MBytes of flash memory the, LigoDLB 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 the highest modulation—256-QAM. The 24V Gigabit Ethernet port (passive PoE) allows utilizing the full capacity of the radio when used in a 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.



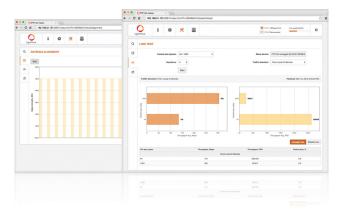
## New form factor

The shape of the enclosure is now smaller, lighter and retains the IP-66 weather protection rating. Smaller packaging reduces freight costs and makes them less obvious. The new LigoDLB 5-90ac 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.



#### Powerfull 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 (500Mbps) allows offering more bandwidth together with additional services such as VoIP and IPTV. This is possible when using LigoWave's smart QoS mechanism and multicast traffic enhancements for triple play services. Such services are essential for all next generation service providers to complement their existing portfolios. iPoll 3, LigoWave's proprietary transmission protocol, ensures smooth performance with a high number of clients even in noisy environments.

# **Specifications**

Product Name

LigoDLB 5-90ac

Coverage recommendation

5km/ 3.1mi

Wireless

WLAN standard IEEE 802.11a/n/ac, iPoll 3

Radio mode MIMO 2×2

Radio frequency band 5,150 - 5,850GHz (FCC 5,150 - 5,250 and 5,725 - 5,850GHz)

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)

802.11ac: OFDM (256-QAM, 64-QAM, 16-QAM, QPSK, BPSK)

Data rates 802.11ac @ 40MHz: 400, 360, 300, 270, 240, 180, 120, 90, 60, 30Mbps

802.11ac @ 80MHz: 866, 780, 650, 585, 520, 390, 260, 195, 130, 65Mbps

Error correction FEC, LDPC

Duplexing scheme Time division duplex

40MHz	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
80MHz	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
				-70	-72	-74	-78	-81	-85	-88	-90

#### **Antenna**

Type Integrated dual-polarized 90 degree sector antenna

Gain 18dBi

Wired

Interface 10/100/1000 Base-T, RJ45

#### **Physical**

Dimensions 380mm, 100mm, 35mm

Weight 0.460g

Mounting Pole mounting bracket included

#### **Power**

Power supply 24VDC passive PoE (AC to 24VDC adapter is included in the package)

Power source 100 – 240VAC

Power consumption (max) 10W

#### **Environmental**

Operating temperature  $-40^{\circ}\text{C} \ (-40^{\circ}\text{F}) \sim +65^{\circ}\text{C} \ (+149^{\circ}\text{F})$  Humidity  $0 \sim 90 \ \% \ (\text{non-condensing})$ 

#### Management

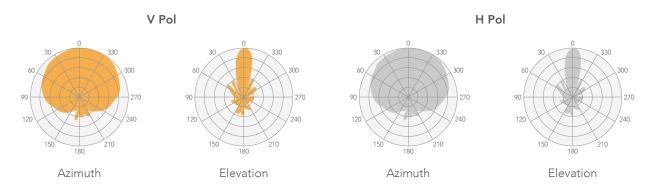
System monitoring SNMP v3, Syslog, Web UI, WNMS

Configuration WebUI, WNMS

#### Regulatory

Certification FCC/IC/CE

### **Antenna specifications**



#### Internal Antenna

Frequency range	5.1 – 5.9GHz
Gain	18dBi
Polarization	Dual linear
Cross-pol Isolation	24dBi
VSWR	<1.7
Azimuth beamwidth (H pol)	90deg
Azimuth beamwidth (V pol)	90deg
Elevation beamwidth	20deg

