





# LigoDLB 5-90 ac

5GHz Base Station with Integrated Antenna

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## 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.

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## 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.

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## 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
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Duplexing scheme	Time division duplex

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

#### Antenna

Type Gain Integrated dual-polarized 90 degree sector antenna 18dBi

Wired

Interface

10/100/1000 Base-T, RJ45

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#### Physical

Dimensions	
Weight	
Mounting	

380mm, 100mm, 35mm 0.460g Pole mounting bracket included

## Power

Power supply Power source Power consumption (max) 24VDC passive PoE (AC to 24VDC adapter is included in the package) 100 – 240VAC 10W

### Environmental

Operating temperature Humidity -40°C (-40°F) ~ +65°C (+149°F) 0 ~ 90 % (non-condensing)

#### Management

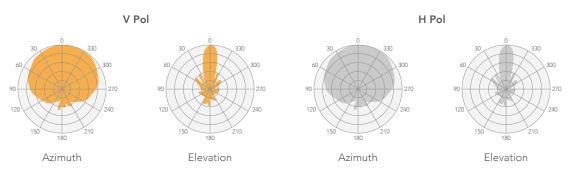
System monitoring	SNMP, Syslog, Web UI, WNMS
Configuration	WebUI, WNMS

## 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



#### DLB 5-90ac

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