



LigoDLB 5-20 ac

5 GHz high-capacity wireless device

U2 1 WHO IN THE STATE OF THE ST

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 5-20 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-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.



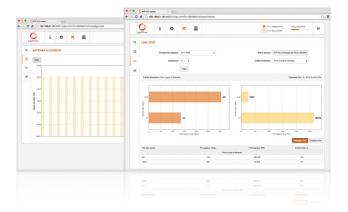
New form factor

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. iPoII, LigoWave's proprietary transmission protocol, ensures smooth performance with a high number of clients even in noisy environments.

Specifications

Distance recommendation	PTMP mode (max)	PTP mode (max)
LigoDLB 5-20 ac	10 km/ 6.21 mi	15 km/ 9.32 mi

Wireless

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

Radio mode MIMO 2x2

Radio frequency band 5 GHz models: 5.150 - 5.850 GHz (FCC 5.150 - 5.250 and 5.725 - 5.850 GHz)

Transmit power Up to 30 dBm (country dependent)

Channel size 5, 10, 20, 40, 80 MHz

Modulation schemes 802.11 a/n: OFDM (64-QAM, 16-QAM, QPSK, BPSK)

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

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

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

Error correction FEC, LDPC

Duplexing scheme Time division duplex

N	Modulation, Mbps	400	360	300	270	240	180	120	90	60	30
40 MHz	TX Power, dBm	26	27	28	29	30	30	30	30	30	30
4	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
80 MHz	TX Power, dBm	24	25	25	26	27	28	28	29	29	29

Antenna

Type Integrated dual-polarized directional panel antenna

Gain 20 dBi

Wired

Interface 10/100/1000 Base-T, RJ45

Physical

Dimensions 216 mm (8.5 "), 184 mm (7.2 "), 80 mm (3.1 ")

Weight 413 g (0.91 lb)

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 – 240 VAC

Power consumption (max) 10 W

Environmental

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

Management

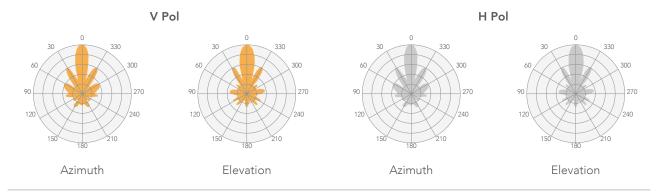
System monitoring SNMP, Syslog, Web UI, WNMS

Configuration WebUI, WNMS

Regulatory

Certification FCC/IC/C

Antenna specifications



Frequency range	5.1 - 5.9 GHz
Gain	20 dBi
Polarization	Dual linear
Cross-pol Isolation	27 dBi
VSWR	<1.8
Azimuth beamwidth (H pol)	16 deg
Azimuth beamwidth (V pol)	16 deg
Elevation beamwidth	16 dea

