



LigoDLB 5-20 ac-TH

5 GHz high-capacity wireless device

Incredible performance

500+ Mbps thruoghput - a result of powerful hardware platform with 802.11ac technology based radio and a proprietary data transmission protocol (iPoll). Based on a QCA 9563 CPU (750 MHz), QCA 9882 radio and 64 MBytes of RAM and 16 MBytes of flash memory the, LigoDLB 5-20 ac-TH series devices are an ideal solution for capac-THity demanding applications. State of the art RF design with great output power and sensitivity parameters improve range and capacity over highest modulation - 256 QAM. The 24V Gigabit Ethernet port (passive PoE) allows utilizing the full capacity of the radio when using in a point-to-point and point-to-multipoint scenario. 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 gradually.



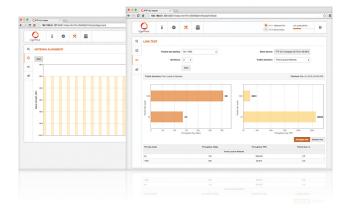
New form factor

New shape of the enclosure is smaller, lighter and with retained IP-66 weather protection raiting. Smaller packaging allows saving freight cost when shipping the goods. The new design has no metal parts, which makes the device lighter and corrosion resistant.



New mounting

The adjustable mounting bracket is ver easy to assemble and install. It consists of two easy to connect parts that allow tilting the device up and down when installing on the pole and a metal strap is included to tighten the device. New mount structure with additional reinforcements and thicker material ensures survival in any climate conditions.



Powerfull OS

The DLB OS is a highly functional and easy to use operating system flawless operation of all DLB hardware devices and effortless setup for those deploying the networks. High performance (500 Mbps) allows offering more bandwidth together with additional services like VoIP and IPTV using a smart QoS mechanism and muticast traffic enhancements for tripple play services, which essential for all next generation service providers complementing their portfolio with more performance and reliability requiring services. iPoll - proprietary transmission protocol ensures smooth performance with a high number of clients even in a noisy environments.

Specifications

Distance recommendation	PTMP mode	PTP mode
LigoDLB 5-20 ac-TH	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 10 dBm (For Thailand)

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

2	Modulation, Mbps	400	360	300	270	240	180	120	90	60	30
40 MHz	TX Power, dBm	6	7	8	9	10	10	10	10	10	10
4 -	Receive sensitivity, dBm	-70	-72	-76	-78	-80	-84	-87	-92	-94	-95
Z	Modulation, Mbps	866	780	650	585	520	390	260	195	130	65
80 MHz	TX Power, dBm	4	5	5	6	7	8	8	9	9	9
ω -	Receive sensitivity, dBm	-64	-66	-70	-72	-74	-78	-81	-85	-88	-90

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

Management

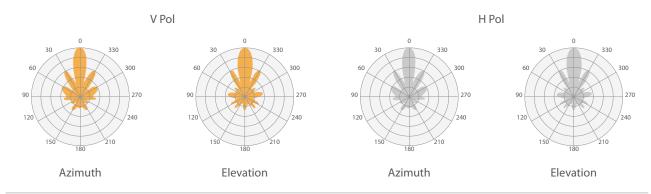
System monitoring SNMP, Syslog, Web UI, WNMS

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 deg

