

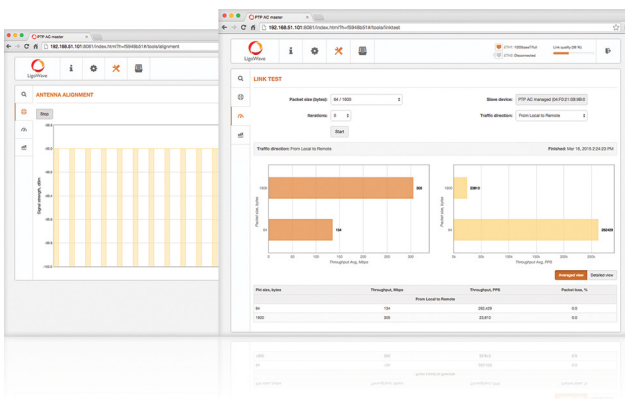
# LigoDLB 5 ac

5 GHz 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). 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 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 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.



## 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 multicast traffic enhancements for triple 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.

WNMS is a FREE enterprise grade Wireless Network Management System. A single software solution simplifies a large number of management and monitoring tasks for network administrators. LigoWave's comprehensive network management system supports several thousands of nodes. Multiple networks may be maintained and monitored using one server. A rich feature set helps to diagnose network problems effectively, visualize networks on a map, perform scheduled firmware upgrades automatically, track states of devices, get failure alerts, and collect statistics. The Web-based system environment supports multi-user accounts. Several administrators may manage different networks on the same server, without having access to each other's equipment. WNMS is available as a stand-alone version for Linux and Windows servers, as a cloud-based system and as a mobile application for Android devices.



# Specifications

Distance recommendation	PTMP mode	PTP mode
LigoDLB 5 ac	Antenna dependent	Antenna dependent

## 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

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	External N-connectors
Gain	Antenna dependent

## Wired

Interface	10/100/1000 Base-T, RJ45
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## Software

Wireless techniques	Smart station polling, smart auto-channel, adaptive auto modulation, automatic transmit power control (ATPC)
Wireless security	WPA/WPA2 personal, WPA/WPA2 enterprise, WACL, user isolation
Wireless QoS	4 queues prioritization on iPoll 3
Network operating modes	Bridge, router IPv4, router IPv6
Network techniques	Routing with and without NAT, VLAN
WAN protocols	Static IP, DHCP client, PPPoE client
Services	DHCP server, SNMP server, NTP client, router advertisement daemon, ping watchdog
Management	HTTP(S) GUI, SSH, SNMP read, WNMS, Telnet
Tools	Site survey, link test, antenna alignment

## Physical

Dimensions	150mm (5.9"), 115mm (4.5"), 55 mm (2.1")
Weight	450 g (16.2 oz)
Mounting	Combination wall/pole mounting with quick swap 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) ~ +65°C (+149 F)
Humidity	0 ~ 90 % (non-condensing)

## Management

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

## Regulatory

Certification	FCC/IC/C
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LigoWave

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

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