LigoVision 5ac

5GHz High-Capacity Wireless Device with N-Connectors for External Antenna

Datasheet

LigoVision Series Designed with Surveillance Scenarios in Mind

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 (750MHz), a QCA 9882 radio and 64MBytes of RAM and 16MBytes of flash memory the, LigoVision series devices are an ideal solution for quality and capacity demanding CCTV applications.

State of the art RF design with great output power and sensitivity parameters improve range and capacity over highest the modulation - 256 QAM.

The PoE out port allows to connect an additional IP camera without the need for a PoE switch, this way reducing overall network costs.

iPoll and QoS mechanisms minimize latency, while prioritizing voice and video traffic. iPoll with triple play support and uplink enhancements enables more cameras to be deployed in network/or higher image quality cameras to be deployed using the same hardware generation.
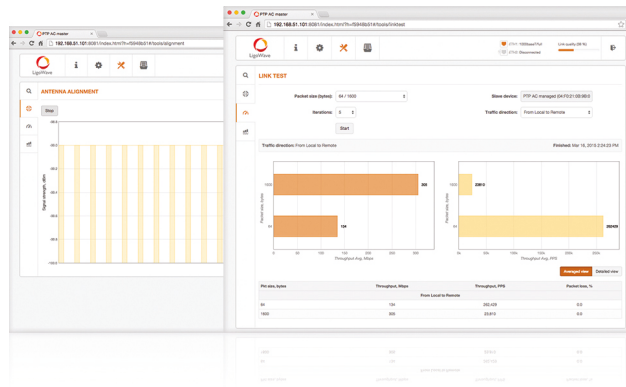
iPoll

LigoWave's iPoll™ PTMP (Point-to-Multi-Point) proprietary protocol is an innovative solution, eliminating transmission congestion and close-cluster interference created in wireless PTMP installations. The proprietary iPoll protocol allows each wireless link to obtain maximum bandwidth with the lowest possible latency. This is accomplished by utilizing a smart polling feature which handles connected clients' activity

Extra ETH Port

LigoVision 5ac incorporates a second Ethernet port with software enabled PoE, dedicated for powering an external device at -48 VDC, such as 802.3af PoE CCTV camera (up to 15W) or another LigoWave device.

LigoWave OS

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

Technical Specifications

Wireless

WLAN Standard	IEEE 802.11a/n/ac, iPoll 3
Radio Mode	Dual 2×2 MIMO
Radio Frequency Band	5GHz models: 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
	Receive sensitivity, dBm	-64	-66	-70	-72	-74	-78	-81	-85	-88	-90

Antenna

Type	N-Connectors for external third-party antenna
Gain	Antenna Dependent
Second Antenna	Integrated 2.4GHz band single-polarized omnidirectional patch antenna
Gain	0dBi

Wired

First Interface	10/100/1000 Base-T with PoE IN (RJ45)
Second Interface	10/100/1000 Base-T with PoE OUT (RJ45)

Power

Power Supply	802.3at or -48 -56VDC passive PoE (AC to 48 VDC PoE Adapter Included)
Power Source	~100-240 VAC
Max Power Consumption	Peak 10 W; Average 6W (Wihout PoE Output Function)
2nd Ethernet Port Power Supply	802.3af/passive 48VDC, up to 15W

Compatibility

Compatible with all LigoDLBn (802.11n) & LigoDLBac (802.11ac) devices

Physical Specifications

Dimensions without mount	150mm (5.9") x 115mm (4.5") x 55mm (2.1")
Weight	450g (16.2 oz)

Environmental Specifications

Operating Temperature	–40°C (–40°F) ~ +65°C (+149°F)
Humidity	0~90% (Non-Condensing)
Ingress Protection	IP66

Management

Dedicated 2.4GHz radio	For management from any Wi-Fi compatible client device
System monitoring	SNMP v3, Syslog, Web UI, WNMS, Infinity Controller
Configuration	WebUI, WNMS, Infinity Controller*

Regulatory Certification   FCC/CE

LigoWave

www.ligowave.com