

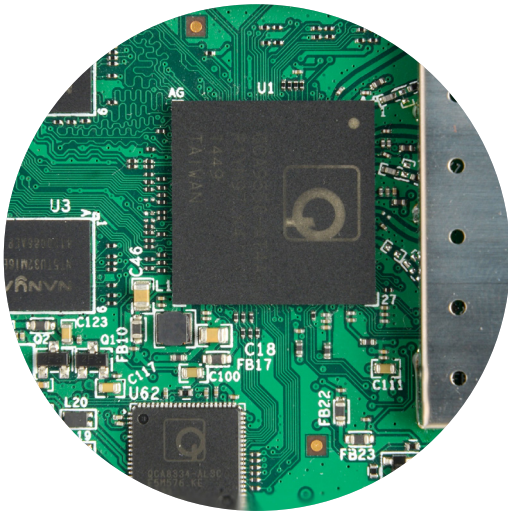


LigoWave



LigoDLB PRO

Powerful, integrated antenna base-stations



Powerful hardware platform

Based on a QCA 9557 chipset (720MHz) and 128MBytes of RAM/Flash memory the LigoDLB PRO series access points are an ideal solution for resource demanding installations with a high number of clients connected to a single AP. The 48V Gigabit Ethernet port (802.3af) allows utilizing the full capacity of the base-stations.



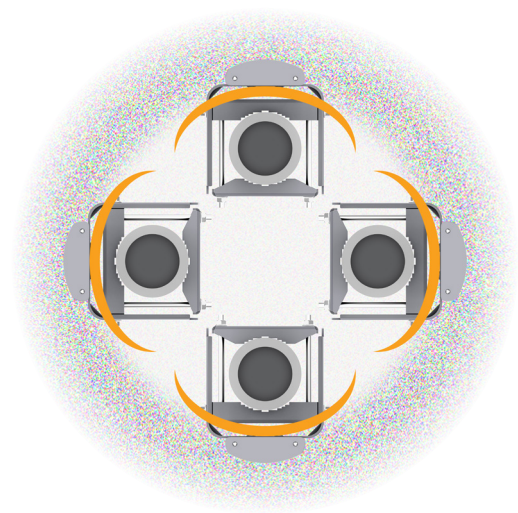
Integrated antenna design

The all-in-one design reduces the risk of cable failures and decreases the signal loss, as the radio is connected directly to the antenna. Such integration allows saving tower space and improves the cost which helps to speed up your ROI.



Solid mount

The LigoDLB PRO mounting bracket allows 15° down-tilt when doing antenna alignment. Supported pole diameters are from 25mm (0.98inch) to 75mm (2.95inches). All devices have an IP-67 enclosure and integrated surge suppression to provide best in class protection from harsh weather conditions in any climate zone.



Improved noise immunity

Metal enclosure works as a deflector eliminating interference caused by backlobes and rejecting noise when multiple base-stations are co-located on a single tower. Apart from RF shielding the metal housing works as a heatsink, allowing better RF performance by dissipating the heat generated by the radio.

Specifications

Model name	Coverage recommendation
LigoDLB 2-90-16 PRO	10km (6.2mi)
LigoDLB 2-90-19 PRO	14km (8.7mi)
LigoDLB 5-90-17 PRO	7km (4.3mi)
LigoDLB 5-90-20 PRO	12km (7.5mi)

Wireless

WLAN standard	IEEE 802.11a/b/g/n, iPoll 3
Radio mode	MIMO 2x2
Radio frequency band	2GHz models: 2.402 – 2.492GHz (FCC 2.412 – 2.462GHz) 5GHz models: 5.150 – 5.850GHz (FCC 5.150 – 5.250 and 5.725 – 5.850GHz)
Transmit power	Up to 29dBm (country dependent)
Channel size	5,10, 20, 40MHz
Modulation schemes	802.11a/g/n: OFDM (64-QAM, 16-QAM, QPSK, BPSK) 802.11b: DSS (CCK, DQPSK, DBPSK)
Data rates	802.11n: 300, 270, 240, 180, 120, 90, 60, 30Mbps 802.11a/g: 54, 48, 36, 24, 18, 12, 9, 6Mbps 802.11b: 11, 5.5, 2, 1Mbps
Error correction	FEC, Selective ARQ
Duplexing scheme	Time division duplex

LigoDLB 2-90-16 PRO/ LigoDLB 2-90-19 PRO:

Receive sensitivity (dBm)	802.11N/ iPoll (20/ 40 MHz)	15Mbps	30Mbps	45Mbps	60Mbps	90Mbps	120Mbps	135Mbps	150Mbps
		-89	-88	-87	-83	-80	-76	-74	-77
802.11g	30Mbps	60Mbps	90Mbps	120Mbps	180Mbps	240Mbps	270Mbps	300Mbps	
	-85	-85	-83	-80	-77	-73	-72	-70	
802.11g	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps	
	-89	-88	-88	-87	-84	-81	-77	-75	
Output power (dBm - combined)	802.11N/ iPoll (20/ 40 MHz)	15Mbps	30Mbps	45Mbps	60Mbps	90Mbps	120Mbps	135Mbps	150Mbps
		29	29	29	29	29	29	28	27
802.11g	30Mbps	60Mbps	90Mbps	120Mbps	180Mbps	240Mbps	270Mbps	300Mbps	
	29	29	29	29	29	29	28	27	
802.11g	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps	
	29	29	29	29	29	29	29	29	

LigoDLB 5-90-17 PRO/ LigoDLB 5-90-20 PRO:

Receive sensitivity (dBm)	802.11N/ iPoll (20/ 40 MHz)	15Mbps	30Mbps	45Mbps	60Mbps	90Mbps	120Mbps	135Mbps	150Mbps
		-97	-93	-91	-86	-83	-79	-77	-76
		30Mbps	60Mbps	90Mbps	120Mbps	180Mbps	240Mbps	270Mbps	300Mbps
	802.11g	-94	-91	-88	-84	-81	-77	-75	-73
		6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
		-97	-96	-94	-92	-88	-85	-81	-79
Output power (dBm - combined)	802.11N/ iPoll (20/ 40 MHz)	15Mbps	30Mbps	45Mbps	60Mbps	90Mbps	120Mbps	135Mbps	150Mbps
		30	30	30	30	30	30	29	29
		30Mbps	60Mbps	90Mbps	120Mbps	180Mbps	240Mbps	270Mbps	300Mbps
	802.11g	30	30	30	30	30	29	29	28
		6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
		30	30	30	30	30	30	30	30

Antenna

Type	Integrated dual-polarized 90° sector antenna
Gain	LigoDLB 2-90-16 PRO – 16dBi LigoDLB 2-90-19 PRO – 19dBi LigoDLB 5-90-17 PRO – 17dBi LigoDLB 5-90-20 PRO – 20dBi

Wired

Interface	10/100/1000 Base-T, RJ45 (802.3af)
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Physical

Dimensions*	574mm (22.6 "), 114mm (4.5 "), 46mm (1.8 ") / 942mm (37.1 "), 114mm (4.5 "), 46mm (1.8 ")
Weight**	3000g (6.6lb) / 3600g (7.94lb)
Mounting	pole mount included

Power

Power supply	37 – 56VDC PoE 802.3af (AC to DC adapter included)
Power source	100 – 240VAC
Power consumption (max)	10W

Environmental

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

Management

System monitoring	SNMP, Syslog, Web UI, Infinity Controller
Configuration	WebUI, Infinity Controller

Regulatory

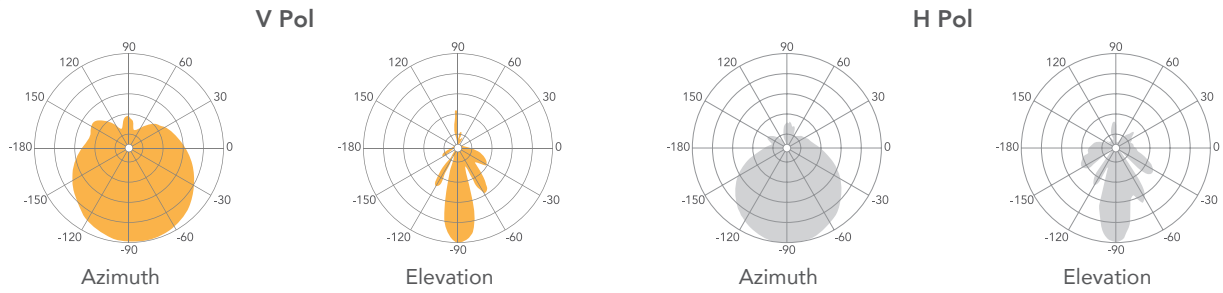
Certification	FCC/IC/CE
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*Dimensions exclude pole mount

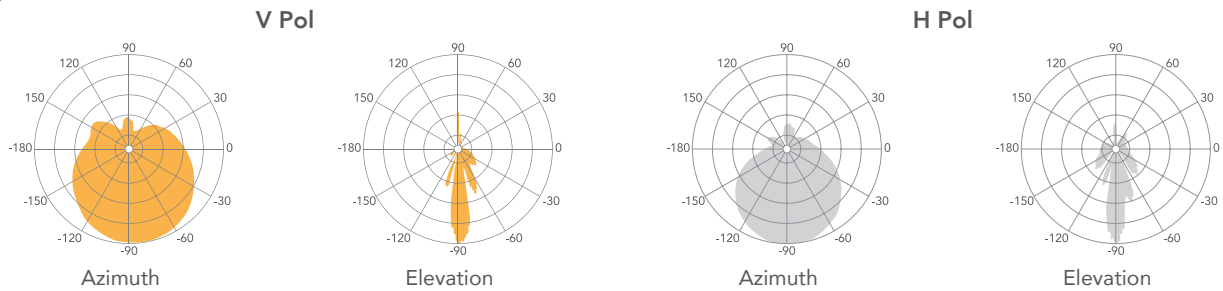
**Weight includes pole mount

Antenna specifications

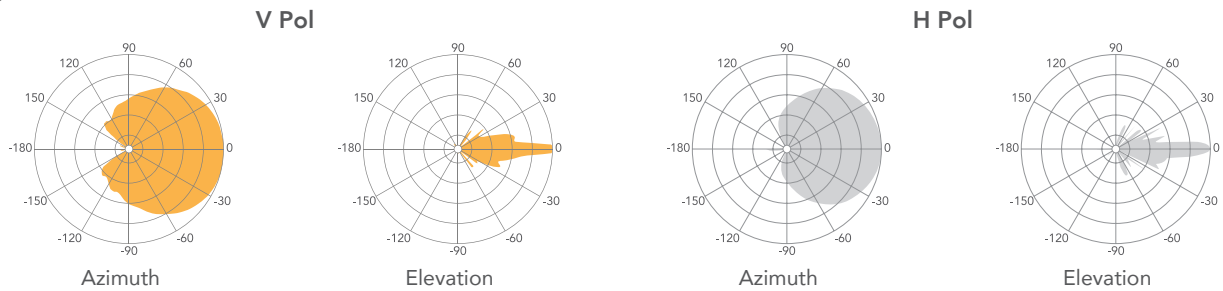
LigoDLB 2-90-16 PRO



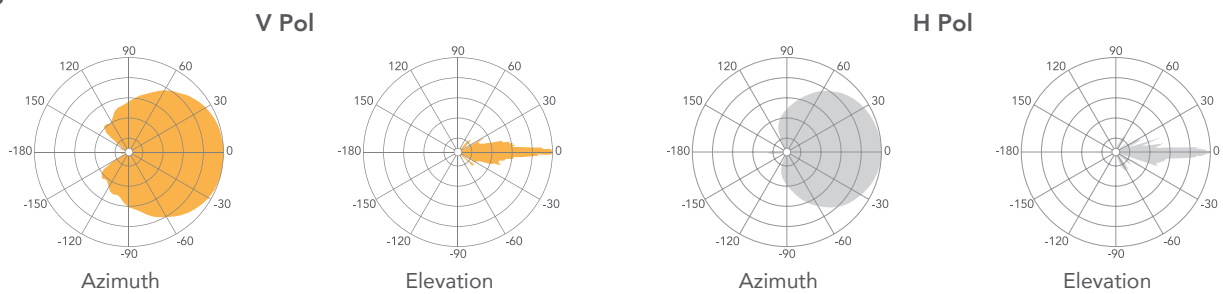
LigoDLB 2-90-19 PRO



LigoDLB 5-90-17 PRO



LigoDLB 5-90-20 PRO



Internal Antenna

Model name	LigoDLB 2-90-16 PRO	LigoDLB 2-90-19 PRO	LigoDLB 5-90-17 PRO	LigoDLB 5-90-20 PRO
Frequency range	2.4 – 2.5GHz	2.4 – 2.5GHz	5.1 – 5.9GHz	5.1 – 5.9GHz
Gain	16	19	17	20
Polarization	Dual linear	Dual linear	Dual linear	Dual linear
Cross-pol Isolation	25dBi	25dBi	24dBi	24dBi
VSWR	<1.6	<2	<1.8	<1.8
Azimuth beamwidth (H pol)	90°	90°	90°	90°
Azimuth beamwidth (V pol)	100°	100°	90°	90°
Elevation beamwidth	24°	24°	20°	20°



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LigoDLB PRO

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