



## LigoDLB PRO ac-TH

500+ Mbps integrated antenna base-station

# 500 + Mbps

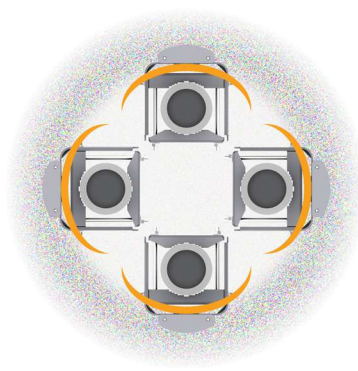
## Incredible performance

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 9557 CPU (720 MHz), QCA 9882 radio and 128 MBytes of RAM/Flash memory the LigoDLB PRO ac-TH series access points are an ideal solution for resource demanding installations. State of the art RF design with great output power and sensitivity parameters improve range and capacity over highest modulation - 256 QAM. The 48V Gigabit Ethernet port (802.3af) allows utilizing the full capacity of the base-station. 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.



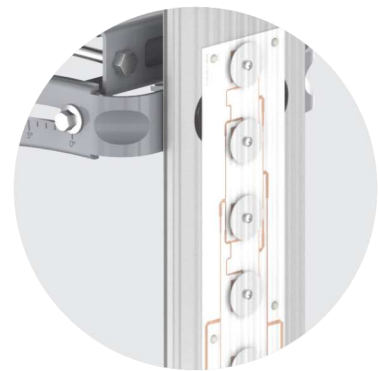
### Solid mount

The LigoDLB PRO ac-TH mounting bracket allows 15° down-tilt when doing antenna alignment. Supported pole diameters are from 25 mm (0.98 inch) to 75 mm (2.95 inches). 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.



### 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.

# Specifications

Model name	Coverage recommendation
LigoDLB PRO 5-90-17ac-TH	7 km (4.3 mi)
LigoDLB PRO 5-90-20ac-TH	12 km (7.5 mi)

## Wireless

WLAN standard	IEEE 802.11 a/b/g/n/ac, iPoll 2 & 3
Radio mode	MIMO 2x2
Radio frequency band	2 GHz models: 2.402 – 2.492 GHz (FCC 2.412 – 2.462 GHz) 5 GHz models: 5.150 - 5.850 GHz (FCC 5.150 - 5.250 and 5.725 - 5.850 GHz)
Transmit power	LigoDLB PRO 5-90-17ac-TH: Up to 13 dBm (For Thailand) LigoDLB PRO 5-90-20 ac-TH: Up to 10 dBm (For Thailand)
Channel size	5,10, 20, 40, 80 MHz
Modulation schemes	802.11 a/g/n: OFDM (64-QAM, 16-QAM, QPSK, BPSK) 802.11 b: DSS (CCK, DQPSK, DBPSK)
Data rates	802.11 n: 300, 270, 240, 180, 120, 90, 60, 30 Mbps 802.11 a/g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps 802.11 b: 11, 5.5, 2, 1 Mbps
Error correction	FEC, Selective ARQ
Duplexing scheme	Time division duplex

### LigoDLB PRO 5-90-17 ac-TH:

40 MHz	Modulation, Mbps	400	360	300	270	240	180	120	90	60	30
	TX Power, dBm	9	10	11	12	13	13	13	13	13	13
	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	7	8	8	9	10	11	11	12	12	12
	Receive sensitivity, dBm	-64	-66	-70	-72	-74	-78	-81	-85	-88	-90

### LigoDLB PRO 5-90-20 ac-TH:

40 MHz	Modulation, Mbps	400	360	300	270	240	180	120	90	60	30
	TX Power, dBm	6	7	8	9	10	10	10	10	10	10
	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	4	5	5	6	7	8	8	9	9	9
	Receive sensitivity, dBm	-64	-66	-70	-72	-74	-78	-81	-85	-88	-90

## Antenna

Type	Integrated dual-polarized 90 degree sector antenna
Gain	LigoDLB PRO 5-90-17ac-TH -17 dBi LigoDLB PRO 5-90-20 ac-TH- 20 dBi

## Wired

Interface	10/100/1000 Base-T, RJ45 (802.3af)
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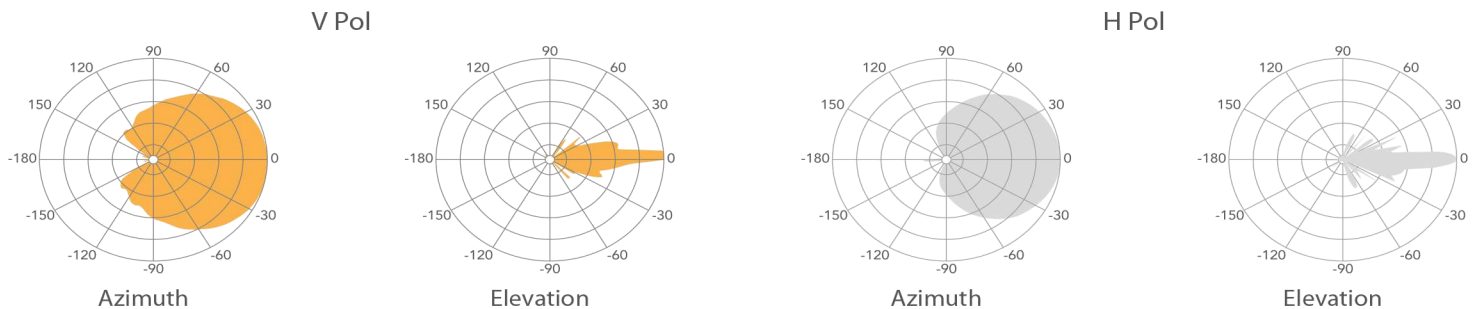
<b>Physical</b>	
Dimensions*	574 mm (22.6"), 114 mm (4.5"), 46 mm (1.8")/ 942 mm (37.1"), 114 mm (4.5"), 46 mm (1.8")
Weight**	3000 g (6.6 lb)/ 3600 g (7.94 lb)
Mounting	pole mount included
<b>Power</b>	
Power supply	37 - 56 VDC PoE 802.3af (AC to DC adapter included)
Power source	100 – 240 VAC
Power consumption (max)	10 W
<b>Environmental</b>	
Operating temperature	-40°C (-40 F) ~ +65°C (+149 F)
Humidity	0 ~ 90 % (non-condensing)
<b>Management</b>	
System monitoring	SNMP, Syslog, Web UI, WNMS
Configuration	WebUI, WNMS
<b>Regulatory</b>	
Certification	FCC/IC/CE

\*Dimensions exclude pole mount

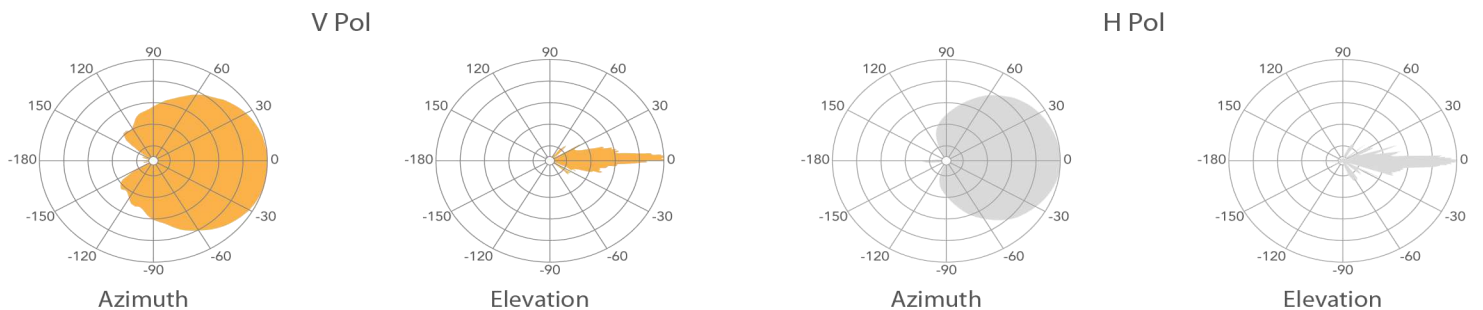
\*\*Weight includes pole mount

## Antenna specifications

### LigoDLB PRO 5-90-17ac-TH



### LigoDLB PRO 5-90-20ac-TH



Model name	LigoDLB PRO 5-90-17ac-TH	LigoDLB PRO 5-90-20ac-TH
Frequency range	5.1 - 5.9 GHz	5.1 - 5.9 GHz
Gain	17	20
Polarization	Dual linear	Dual linear
Cross-pol Isolation	24 dBi	24 dBi
VSWR	<1.8	<1.8
Azimuth beamwidth (H pol)	90 deg	90 deg
Azimuth beamwidth (V pol)	90 deg	90 deg
Elevation beamwidth	20 deg	20 deg



LigoWave

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