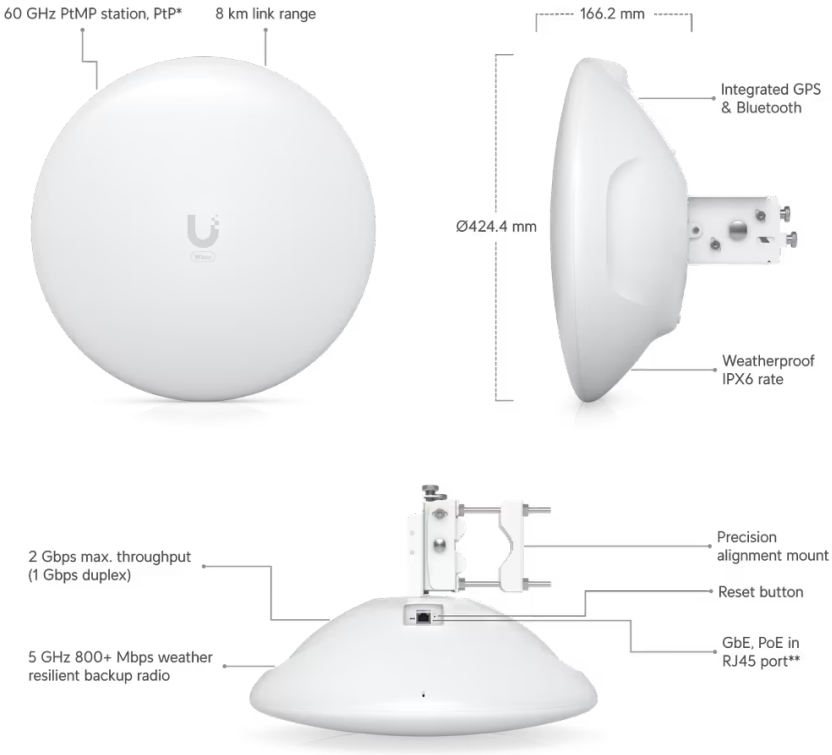
Wave Long-Range

Wave-LR



*FW version 3.2.0 and later.
**48V DC, 0.65A 2.5 GbE PoE adapter included.

Mechanical

Dimensions	Ø424.4 x 166.2 mm (Ø16.7 x 6.5")
Weight	Without mount: 2.59 kg (5.7 lb) With mount: 3.79 kg (8.4 lb)
Enclosure material	UV stabilized plastic
Mount material	Stainless steel
Pole mount diameter	25 to 76.2 mm (1 to 3") on pipe outer diameter
Wind loading	286 N at 200 km/h (64.3 lbf at 125 mph)
Weatherproofing	IPX6

Hardware

Processor	Dual ARM® Cortex®-A53 cores at 1 GHz
Memory	DDR3L 512 MB
Networking interface	(1) GbE RJ45 port
Max. power consumption	20W
Power method	Passive PoE 4-pairs (1, 2+; 3, 6-) (4, 5+; 7, 8-) Passive PoE 2-pairs (4, 5+; 7, 8-), for 44-54V DC only

Power supply	48V DC, 0.65A gigabit PoE adapter (included) Can be powered by a UISP Router or UISP Switch
Supported voltage range	44-54V DC 22-27V DC
GPS	Yes
Button	Factory reset
LEDs	Power, Ethernet, GPS, link
Operating temperature	-40 to 60° C (-40 to 140° F)
Operating humidity	5 to 95% noncondensing
Certifications	FCC, IC, CE

Software

Operating mode	PtMP station, PtP* *FW version 3.2.0 and later.
Ubiquiti specific features	Wave AI, discovery protocol
Services	UISP, ping watchdog, NTP client, SNMP
Tools	Antenna alignment, discovery utility, ping, trace route, speed test
Network	Bridge/Router* mode *Router is available in PtMP station mode only.
Application requirements	UISP: Version 1.4.5 and later

System

Total throughput	2 Gbps (1 Gbps duplex)
Max. range	8+ km
Encryption	WPA2-PSK (AES)

RF

Operating frequency*	57-71 GHz *Depends on regulatory region.
Channel bandwidth	2160, 1080 MHz
Operating channels*	58320, 59400, 60480, 61560, 62640, 63720, 64800, 65880, 66960, 68040, 69120, 70200 MHz *Depends on regulatory region.
Modulation	16QAM, QPSK

Antenna gain	46 dBi
Polarization	Vertically linear
Beamwidth	Azimuth: 3 dB 1° Elevation: 3 dB 1°

Back-Up RF

WiFi standard	802.11ax (WiFi 6)

Operating frequency*	
US/CA	U-NII-1 5150 - 5250 MHz U-NII-2A 5250 - 5350 MHz U-NII-2C 5470 - 5725 MHz U-NII-3 5725 - 5850 MHz
Worldwide	5150 - 5875 MHz *Depends on regulatory region.
Channel bandwidth	20, 40, 80 MHz
Modulation	BPSK (1 2), QPSK (1 2), QPSK (3/4), 16QAM (1 2), 16QAM (3/4), 64QAM (2/3), 64QAM (3 4), 64QAM (5/6), 256QAM (3 4), 256QAM (5/6), 1024QAM (3/4), 1024QAM (5/6)
Antenna gain	22 dBi
Polarization	Dual-linear
Beamwidth	Azimuth: 3 dB 8° Elevation: 3 dB 8°
Cross-pol isolation	20 dB

LEDs

Power	Flashing white: bootup in progress White: not connected to UISP application Blue: connected to UISP application Flashing blue: locate in progress Blue/white: firmware upgrade in progress
Ethernet	Flashing blue: Ethernet traffic detected
GPS	Blue: receiving at least (4) GPS satellite signal
Links	White: 5GHz link Blue: 60GHz link