Ubiquiti Wave Long-Range Technical Specifications

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 18W

Power method 48V DC passive PoE 4-pairs (1, 2+; 3, 6-) (4,5+; 7, 8-) or 2-pairs (4, 5+; 7, 8-)

24V DC passive PoE 4-pairs (1, 2+; 3, 6-) (4, 5+; 7, 8-)

Power supply 48V DC, 0.65A gigabit PoE adapter (included). Can be powered by a UISP Router or UISP Switch

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

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

Application requirements UISP: Version 1.4.5 and later

System

Total throughput 2 Gbps (1 Gbps duplex)

Maximum range 8+ km

Encryption WPA2-PSK (AES)

<u>RF</u>

Operating frequency* 57 to 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

Azimuth and elevation beamwidth 3 dB: 0.8°, 6 dB: 1.1°

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

Cross-pol isolation 20 dB

Azimuth and elevation beamwidth 3 dB: 8 to 10°

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