

## Wave AP



## Mechanical

|                     |  |
|---------------------|--|
| Dimensions          | 212 x 205 x 187 mm (8.3 x 8.1 x 7.4")        |
| Weight              | 2.3 kg (5.07 lb)                             |
| Enclosure materials | Aluminum alloy, UV stabilized polycarbonate  |
| Pole mount diameter | 25 to 76 mm (1 to 3") on pipe outer diameter |
| Wind loading        | 98 N at 200 km/h (22 lbf at 125 mph)         |
| Weatherproofing     | IPX6   |

## Hardware

|                        |   |
|------------------------|---|
| Processor              | Quad ARM® Cortex®-A53 cores at 1.4GHz   |
| Memory                 | DDR3L 512MB   |
| Networking interface   | (1) GbE RJ45 port<br>(1) 1/10G SFP+ port  |
| Max. power consumption | 24W   |
| Power method           | 48VDC passive PoE 4-pairs (1, 2+; 3, 6-) (4,5+; 7, 8-) or 2-pairs (4, 5+; 7, 8-)<br>24VDC passive PoE 4-pairs (1, 2+; 3, 6-) (4, 5+; 7, 8-) |
| Power supply           | 48VDC, 0.65A gigabit PoE adapter (included)<br>Can be powered by a UISP Router or UISP Switch   |
| Button                 | Factory reset   |
| LEDs                   | Power, Ethernet, GPS  |
| Operating temperature  | -40 to 60° C (-40 to 140° F)  |
| Operating humidity     | 5 to 95% noncondensing  |
| Certifications         | FCC, IC, CE   |

## Software

|                               |   |
|-------------------------------|---|
| OS                            | airOS®  |
| Operating mode                | PtMP access point   |
| Ubiquiti specific features    | Integrated 60 GHz radio, discovery protocol, Wave technology        |
| Services                      | UISP, ping watchdog, NTP client, SNMP                               |
| Tools                         | Antenna alignment, discovery utility, ping, trace route, speed test |
| Network                       | Bridge mode   |
| Software management           | Bluetooth management for easy setup over UISP app<br>WEB UI         |
| Minimum software requirements | Any modern web browser/iOS or Android based smartphone              |

## System

|                         |                            |
|-------------------------|----------------------------|
| Total throughput        | 5.4 Gbps (2.7 Gbps duplex) |
| Supported clients count | 15                         |

|       |  |
|-------|--|
| Range | Connecting to a Wave LR: up to 8 km<br>Connecting to a Wave Nano: up to 5 km |
|-------|--|

|            |                |
|------------|----------------|
| Encryption | WPA2-PSK (AES) |
|------------|----------------|

## RF

|                      |   |
|----------------------|---|
| Operating frequency* | 57 to 71 GHz<br><small>*Depends on regulatory region.</small> |
|----------------------|---|

|     |     |
|-----|-----|
| GPS | Yes |
|-----|-----|

|                   |                |
|-------------------|----------------|
| Channel bandwidth | 2160, 1080 MHz |
|-------------------|----------------|

|                     |   |
|---------------------|---|
| Operating channels* | 58320, 59400, 60480, 61560, 62640, 63720, 64800, 65880, 66960, 68040, 69120, 70200 MHz<br><small>*Depends on regulatory region.</small> |
|---------------------|---|

|            |             |
|------------|-------------|
| Modulation | 16QAM, QPSK |
|------------|-------------|

|              |        |
|--------------|--------|
| Antenna gain | 24 dBi |
|--------------|--------|

|              |                   |
|--------------|-------------------|
| Polarization | Vertically linear |
|--------------|-------------------|

|           |   |
|-----------|---|
| Beamwidth | Azimuth: 30°<br>Elevation: 3 dB 3°, 6 dB 4° |
|-----------|---|

|                     |    |
|---------------------|----|
| Electrical downtilt | 0° |
|---------------------|----|

## Back-Up RF

|               |                   |
|---------------|-------------------|
| WiFi standard | 802.11ax (WiFi 6) |
|---------------|-------------------|

|                      |           |                 |                 |
|----------------------|-----------|-----------------|-----------------|
| Operating frequency* | US/CA     | U-NII-1         | 5150 - 5250 MHz |
|                      |           | U-NII-3         | 5725 - 5850 MHz |
|                      | Worldwide | 5150 - 5875 MHz |                 |

\*Depends on regulatory region.

|                   |                |
|-------------------|----------------|
| Channel bandwidth | 20, 40, 80 MHz |
|-------------------|----------------|

|            |   |
|------------|---|
| Modulation | BPSK (½), QPSK (½), QPSK (¾), 16QAM (½), 16QAM (¾), 64QAM (2/3), 64QAM (¾), 64QAM (5/6), 256QAM (¾), 256QAM (5/6), 1024QAM (¾), 1024QAM (5/6) |
|------------|---|

|              |        |
|--------------|--------|
| Antenna gain | 12 dBi |
|--------------|--------|

|                     |       |
|---------------------|-------|
| Cross-pol isolation | 10 dB |
|---------------------|-------|

|                   |    |
|-------------------|----|
| Electric downtilt | 0° |
|-------------------|----|

## LEDs

|       |  |
|-------|--|
| Power | Flashing white: bootup in progress<br>White: not connected to UISP application<br>Blue: connected to UISP application<br>Flashing blue: locate in progress<br>Blue/white: firmware upgrade in progress |
|-------|--|

|          |   |
|----------|---|
| Ethernet | Flashing white: Ethernet traffic detected<br>Flashing blue: SFP+ traffic detected |
|----------|---|

|     |   |
|-----|---|
| GPS | Blue: receiving at least (4) GPS satellite signal |
|-----|---|

