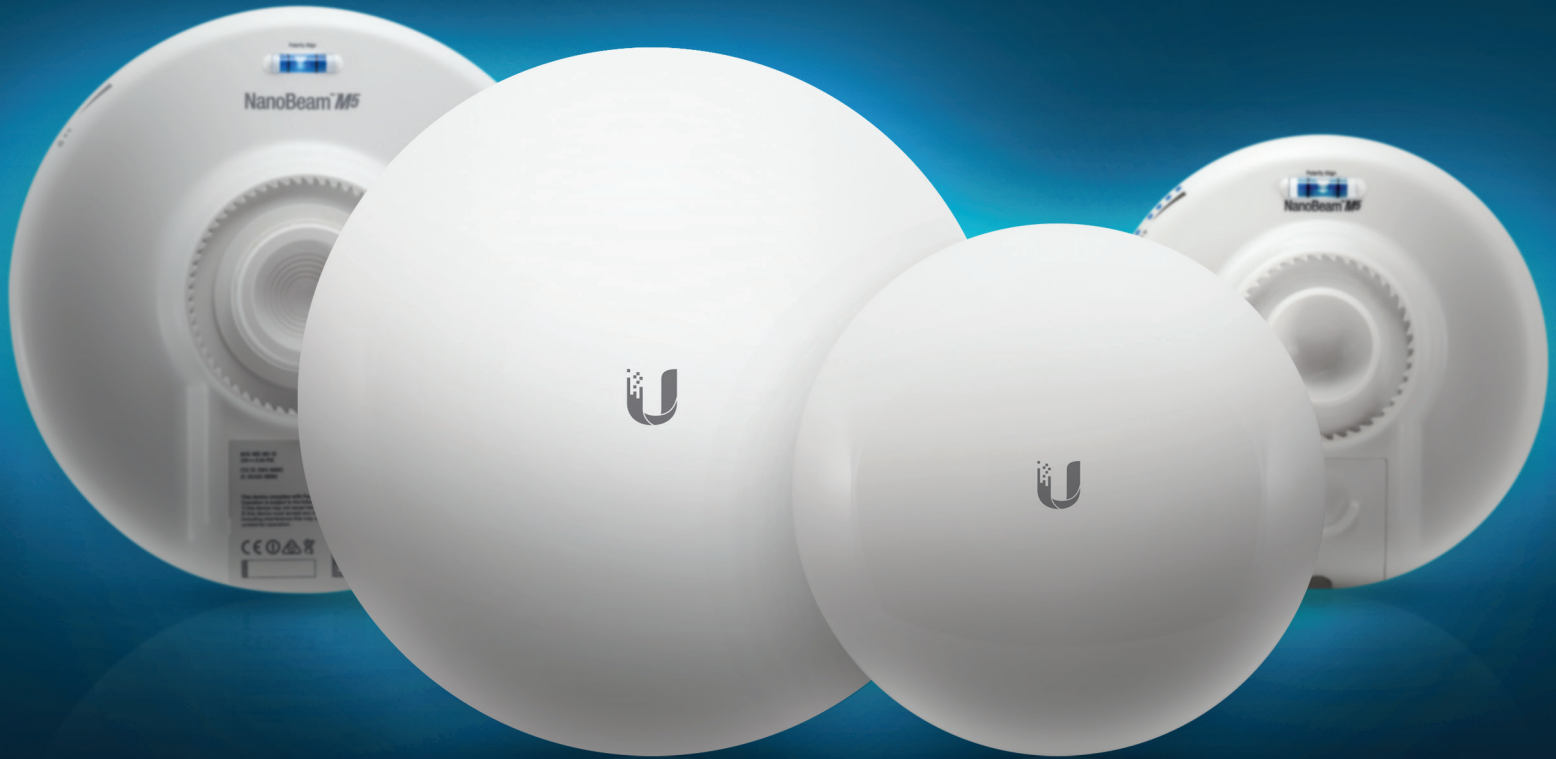




# NanoBeam<sup>®</sup> *M*

High-Performance airMAX<sup>®</sup> Bridge

Models: NBE-M2-13, NBE-M5-16, NBE-M5-19

Uniform Beamwidth Maximizes Noise Immunity

Innovative Mechanical Design

High-Speed Processor for Superior Performance



# Specifications

| NBE-M5-16              |                                                                 |                  |                  |                  |                  |
|------------------------|-----------------------------------------------------------------|------------------|------------------|------------------|------------------|
| Dimensions             | 140 x 140 x 54 mm (5.51 x 5.51 x 2.13")                         |                  |                  |                  |                  |
| Weight                 | 0.320 kg (0.71 lb)                                              |                  |                  |                  |                  |
| Power Supply           | 24V, 0.5A PoE                                                   |                  |                  |                  |                  |
| Max. Power Consumption | 6W                                                              |                  |                  |                  |                  |
| Operating Frequency    | Worldwide                                                       | USA: U-NII-1     | USA: U-NII-2A    | USA: U-NII-2C    | USA: U-NII-3     |
|                        | 5150 - 5875 MHz                                                 | 5150 - 5250 MHz* | 5250 - 5350 MHz* | 5470 - 5725 MHz* | 5725 - 5850 MHz* |
| Gain                   | 16 dBi                                                          |                  |                  |                  |                  |
| Networking Interface   | (1) 10/100 Ethernet Port                                        |                  |                  |                  |                  |
| Processor Specs        | Atheros MIPS 74Kc, 560 MHz                                      |                  |                  |                  |                  |
| Memory                 | 64 MB DDR2, 8 MB Flash                                          |                  |                  |                  |                  |
| LEDs                   | (1) Power, (1) LAN, (4) WLAN                                    |                  |                  |                  |                  |
| Signal Strength LEDs   | Software-Adjustable to Correspond to Custom RSSI Levels         |                  |                  |                  |                  |
| Max. VSWR              | 1.5:1                                                           |                  |                  |                  |                  |
| Channel Sizes          | 5/8/10/20/30/40 MHz                                             |                  |                  |                  |                  |
| Polarization           | Dual Linear                                                     |                  |                  |                  |                  |
| Enclosure              | Outdoor UV Stabilized Plastic                                   |                  |                  |                  |                  |
| Mounting               | Pole-Mount (Kit Included), Wall-Mount                           |                  |                  |                  |                  |
| Wind Loading           | 21.4 N @ 200 km/h (4.8 lbf @ 125 mph)                           |                  |                  |                  |                  |
| Wind Survivability     | 200 km/h (125 mph)                                              |                  |                  |                  |                  |
| ESD/EMP Protection     | Air: ± 24 kV, Contact: ± 24 kV                                  |                  |                  |                  |                  |
| Operating Temperature  | -40 to 70° C (-40 to 158° F)                                    |                  |                  |                  |                  |
| Operating Humidity     | 5 to 95% Noncondensing                                          |                  |                  |                  |                  |
| Wireless Approvals     | FCC, IC, CE                                                     |                  |                  |                  |                  |
| RoHS Compliance        | Yes                                                             |                  |                  |                  |                  |
| Salt Fog Test          | IEC 68-2-11 (ASTM B117), Equivalent: MIL-STD-810 G Method 509.5 |                  |                  |                  |                  |
| Vibration Test         | IEC 68-2-6                                                      |                  |                  |                  |                  |
| Temperature Shock Test | IEC 68-2-14                                                     |                  |                  |                  |                  |
| UV Test                | IEC 68-2-5 at 40° C (104° F), Equivalent: ETS 300 019-1-4       |                  |                  |                  |                  |
| Wind-Driven Rain Test  | ETS 300 019-1-4, Equivalent: MIL-STD-810 G Method 506.5         |                  |                  |                  |                  |

| NBE-M5-16 Output Power: 26 dBm |             |         |           |                         |             |              |           |
|--------------------------------|-------------|---------|-----------|-------------------------|-------------|--------------|-----------|
| TX Power Specifications        |             |         |           | RX Power Specifications |             |              |           |
| Modulation                     | Data Rate   | Avg. TX | Tolerance | Modulation              | Data Rate   | Sensitivity  | Tolerance |
| <b>802.11a</b>                 | 6 - 24 Mbps | 26 dBm  | ± 2 dB    | <b>802.11a</b>          | 6 - 24 Mbps | -94 dBm Min. | ± 2 dB    |
|                                | 36 Mbps     | 25 dBm  | ± 2 dB    |                         | 36 Mbps     | -80 dBm      | ± 2 dB    |
|                                | 48 Mbps     | 24 dBm  | ± 2 dB    |                         | 48 Mbps     | -77 dBm      | ± 2 dB    |
|                                | 54 Mbps     | 23 dBm  | ± 2 dB    |                         | 54 Mbps     | -75 dBm      | ± 2 dB    |
| <b>802.11n/airMAX</b>          | MCS0        | 26 dBm  | ± 2 dB    | <b>802.11n/airMAX</b>   | MCS0        | -96 dBm      | ± 2 dB    |
|                                | MCS1        | 25 dBm  | ± 2 dB    |                         | MCS1        | -95 dBm      | ± 2 dB    |
|                                | MCS2        | 25 dBm  | ± 2 dB    |                         | MCS2        | -92 dBm      | ± 2 dB    |
|                                | MCS3        | 25 dBm  | ± 2 dB    |                         | MCS3        | -90 dBm      | ± 2 dB    |
|                                | MCS4        | 24 dBm  | ± 2 dB    |                         | MCS4        | -86 dBm      | ± 2 dB    |
|                                | MCS5        | 23 dBm  | ± 2 dB    |                         | MCS5        | -83 dBm      | ± 2 dB    |
|                                | MCS6        | 23 dBm  | ± 2 dB    |                         | MCS6        | -77 dBm      | ± 2 dB    |
|                                | MCS7        | 23 dBm  | ± 2 dB    |                         | MCS7        | -74 dBm      | ± 2 dB    |
|                                | MCS8        | 26 dBm  | ± 2 dB    |                         | MCS8        | -95 dBm      | ± 2 dB    |
|                                | MCS9        | 25 dBm  | ± 2 dB    |                         | MCS9        | -93 dBm      | ± 2 dB    |
|                                | MCS10       | 25 dBm  | ± 2 dB    |                         | MCS10       | -90 dBm      | ± 2 dB    |
|                                | MCS11       | 25 dBm  | ± 2 dB    |                         | MCS11       | -87 dBm      | ± 2 dB    |
|                                | MCS12       | 24 dBm  | ± 2 dB    |                         | MCS12       | -84 dBm      | ± 2 dB    |
|                                | MCS13       | 23 dBm  | ± 2 dB    |                         | MCS13       | -79 dBm      | ± 2 dB    |
|                                | MCS14       | 23 dBm  | ± 2 dB    |                         | MCS14       | -78 dBm      | ± 2 dB    |
|                                | MCS15       | 23 dBm  | ± 2 dB    |                         | MCS15       | -75 dBm      | ± 2 dB    |

\* Some frequencies may require activation; visit: <https://www.ubnt.com/fcclabelrequest>