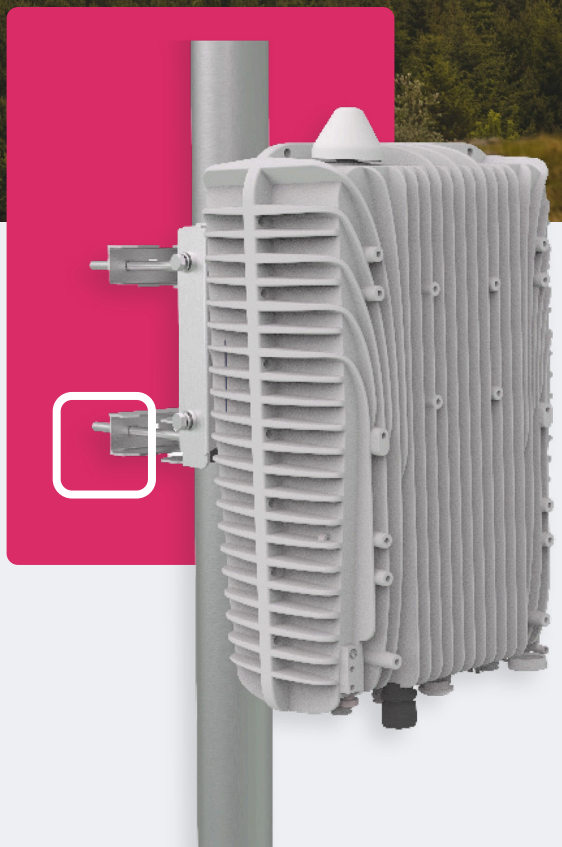
COMMUNICATION COMPONENTS INC.

BLiNQ NETWORKS

# WIRELESS SOLUTIONS FOR

# ANYONE, ANYWHERE.



FW-600

## FW-600

B41

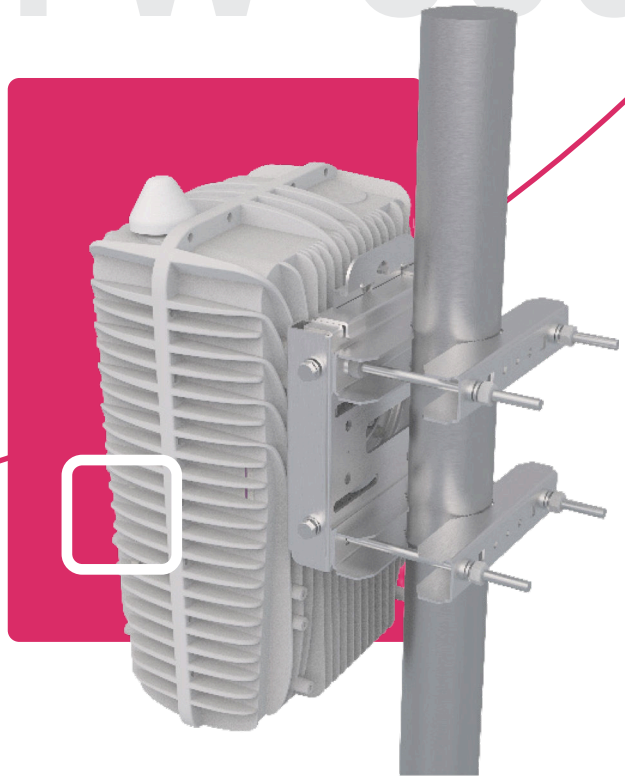
# YOUR NETWORK. OUR SOLUTIONS.

## About BLiNQ Networks

BLiNQ Networks is a pioneer manufacturer of CBRS-certified fixed access and mobile broadband wireless equipment, providing industry-leading price & performance in LTE and 5G-ready solutions.

**FW-600 B41**
**SUMMARY**

FW-600



# A POWERFUL NETWORK SOLUTION THAT PUSHES BOUNDARIES

The FW-600 is an ultra-high capacity, all integrated multicarrier LTE base station system designed as a response to today's broadband connectivity needs in rural and dense suburban markets.

This powerful base station comes in either a single or dual band architecture and can easily match or out-perform most mMIMO commercial solutions. Paired with passive beamforming antenna systems, the FW-600 brings spectral efficiency and capacity to new horizons.

# FW-600 B41 SINGLE BAND ARCHITECTURE

**SUMMARY**

## THE FW-600 B41 SINGLE BAND ARCHITECTURE FEATURES:

- 3 Beams x 1CC (per each beam)
- Peak:
  - 510 Mbps/Sector – 3 Beam Antenna
  - 1020 Mbps/Sector – 6 Beam Antenna
- 4 Sectors Architecture

The FW-600 product can also pair B41 and B46 by a different sku. Contact our sales team for more information.

### NOTE

- [ ] Carrier aggregation is contiguous and non-contiguous covering entire band without IBW window restrictions.

# FW-600

**SPECIFICATIONS BASIC MULTI ENB BBU/RRH UNIT**

| MODEL SERIES | | |
|---|---|---|
| | **BASE STATION** | FW-600 B41 |
| RADIO SPECIFICATION | | |
| | **Frequency Band** | TDD LTE Bands 41 |
| | **EIRP** | 62 dBm/1CC |
| | **Channel Bandwidth** | 10, 20 MHz (5 MHz, 15 MHz) |
| | **MIMO** | 6Tx x 6Rx (several possible MIMO configurations) |
| | **LTE Compliance** | 3GPP Release 10 (SW upgrade to Release 13) |
| MECHANICAL | | |
| | **Dimensions (LxWxD) Base Unit** | 19.4” x 12” x 8.4” (492 mm x 304 mm x 160 mm) |
| | **Survival Wind Speed** | >125 mph (FW-600: >200 kph) |
| | **Weight** | 25.0 Kg |
| | **Bracket Weight** | 33.1 lbs (15 kg) – Supports up to 3 x FW-600 units |
| | **Operational Temperature** | -40 °F to 140 °F (-40 °C to 60 °C) |
| PERFORMANCE & ATTRIBUTES | | |
| | **Connected/Active UEs** | Up to 576 active users per Base Unit (can be SW upgraded) |
| | **Throughput DL TDD Config 2-7** | 3 x 140 Mbps per sector (3 Beam Antenna)<br>6 x 140 Mbps per sector (6 Beam Antenna) |
| | **Throughput UL TDD Config 2-7** | 3 x 32 Mbps per sector (3 Beam Antenna)<br>6 x 32 Mbps per sector (6 Beam Antenna) |
| | **Operating Mode** | TD-LTE supports all standard frame configurations |
| | **Power Consumption** | 480 W |
| | **Power** | 48V DC |
| | **Connectivity** | 1 x Copper 1000BaseT<br>1 x SFP<br>1 x PPS TNC Connector<br>6 x 2.2-5 RF Connectors |
| | **Synchronization** | Integral GPS receiver (GPS GLONASS BeiDou), 1588v2 |
| | **Embedded EPC** | Software Option |
| OA&M | | |
| | **Configuration** | WebUI / CLI, Radio and Ethernet performance monitoring |
| | **EMS Integration** | SNMP v2c/v3 |
| | **OAM Protocols** | Netconf, HTTP(S), TCP/IP, UDP, (S)FTP, SSH, TR-069/TR-196 |

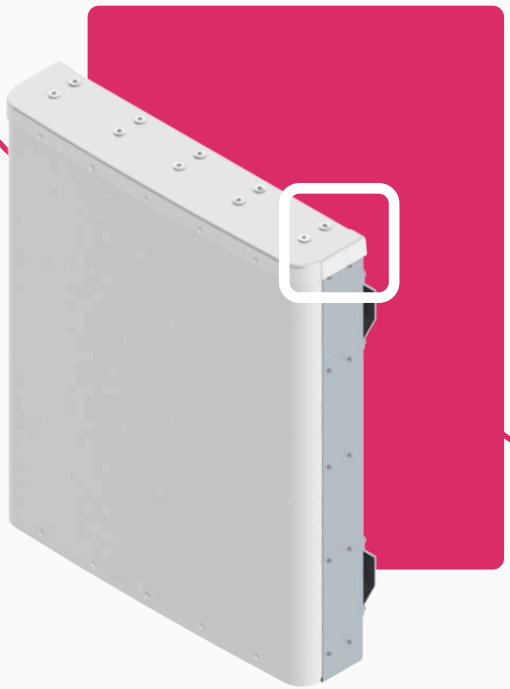
* 6 ports antenna

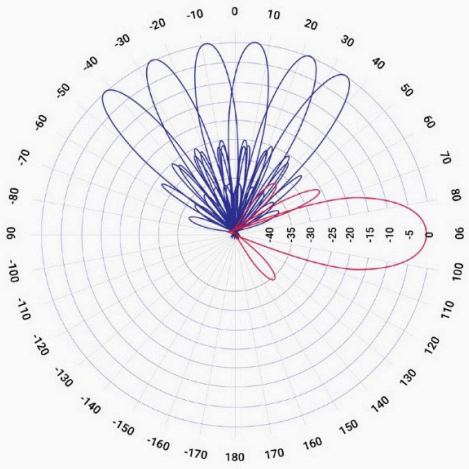
Here are some recommended antenna pairings and their deployment configurations.

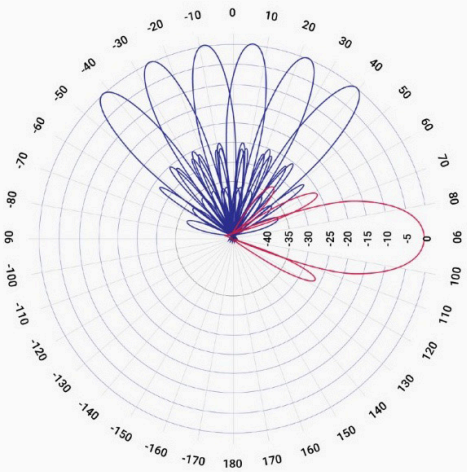
# MBM6F-H2D:

## 6 BEAM 4 X 4 MIMO ANTENNA

This CCI Multifunction Multibeam Antenna contains 6 independent LTE Optimized Beams with 4x4 MIMO capability or 12 independent LTE Optimized Beams with 2x2 MIMO capability. This antenna is intended for use at data hotspots and other congested locals, where the ability to share photos and videos and other high demand applications require high capacity and high data rates.







# FW-600 B41

## ANTENNA SPECIFICATIONS

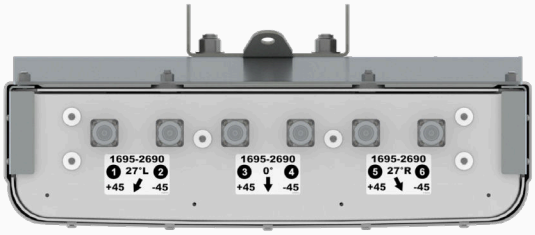
| | | |
|---|---|---|
| ELECTRICAL | | |
| | **Ports** | 24 x High Band ports for 2300-2690 MHz |
| | **Frequency Range** | 2496-2690 MHz |
| | **Gain** | 20.9 dBi |
| | **Azimuth Beamwidth (-3dB)** | 10.4° |
| | **Azimuth Beam cross-over** | 10.9 dB |
| | **Elevation Beamwidth (-3dB)** | 10.9° |
| | **Electrical Downtilt** | 5° |
| | **Elevation Sidelobes (1st Upper)(Typ.)** | < -20 dB |
| | **Cross-Polar discrimination (at Peak)** | > 18 dB |
| | **Front-to-Back Ratio @180°** (Typ.) | > 35 dB |
| | **Cross-Polar Port-to-Port Isolation** | > 25 dB |
| | **Interbeam Co-Pol Isolataion** | > 15 dB |
| | **Interbeam Co-Pol Isolation (Non-Adjacent Beams) (Worse Case)** | > 10 dB |
| | **Voltage Standing Wave Ratio (VSWR)** | < 1.5:1 |
| | **Passive Intermodulation (2x20W)** | ≤ -153 dBc |
| | **Input Power Continuous Wave (CW)** | 200 watts |
| | **Polarization** | Dual Pol 45° |
| | **Input Impedance** | 50 ohms |
| | **Lightning Protection** | DC Ground |
| MECHANICAL | | |
| | **Dimensions (LxWxD)** | 37.6” x 31.3” x 6.6” (955 mm x 794 mm x 169 mm) |
| | **Survival Wind Speed** | > 150 mph (> 241 kph) |
| | **Front Wind load** | 251 lbs (1116 N) @ 100 mph (161 kph) |
| | **Side Wind Load** | 60 lbs (265 N) @ 100 mph (161 kph) |
| | **Equivalent Flat Plate Area** | 9.8 $ft^2$ (0.9 $m^2$) |
| | **Weight*** | 60.6 lbs (27.5 kg) |
| | **Connector** | 24 x 4.3-10 female |
| | **Mounting Pole** | 2 to 5 in (5 to 12 cm) |

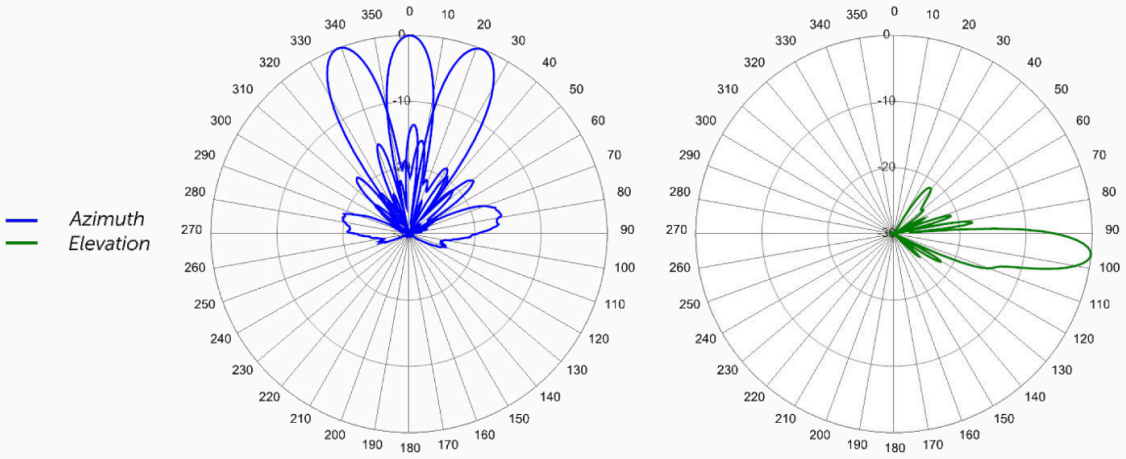
* Weight excludes mounting

# MBA3F-E3A:

## 3 BEAM SPECIAL EVENTS ANTENNA

- Three foot (0.8 m) tall, single band, six port multibeam array. Containing Three Independent LTE Optimized Beams covering 1695-2690 MHz frequencies.
- LTE Optimized Beams for improved LTE data throughput by minimizing beam crossover, providing for an efficient use of valuable radio capacity and frequency spectrum.




2650 MHz Azimuths

2650 MHz Elevation 6°

# FW-600 B41

## ANTENNA SPECIFICATIONS

| | | |
|---|---|---|
| ELECTRICAL | | |
| | **Ports** | 6 x High Band ports for 1695-2690 MHz |
| | **Frequency Range** | 2496-2690 MHz |
| | **Gain** | 21.5 dBi |
| | **Azimuth Beamwidth (-3dB)** | 12.8° |
| | **Azimuth Beam cross-over** | 11.0 dB |
| | **Elevation Beamwidth (-3dB)** | 9.7° |
| | **Electrical Downtilt** | 5° |
| | **Elevation Sidelobes (1st Upper)(Typ.)** | < -16 dB |
| | **Cross-Polar discrimination (at Peak)** | > 35 dB |
| | **Front-to-Back Ratio @180°** (Typ.) | > 19 dB |
| | **Cross-Polar Port-to-Port Isolation** | > 24 dB |
| | **Interbeam Co-Pol Isolataion** | > 15 dB |
| | **Interbeam Co-Pol Isolation (Non-Adjacent Beams) (Worse Case)** | > 12 dB |
| | **Voltage Standing Wave Ratio (VSWR)** | < 1.5:1 |
| | **Passive Intermodulation (2x20W)** | ≤ -153 dBc |
| | **Input Power Continuous Wave (CW)** | 200 watts |
| | **Polarization** | Dual Pol 45° |
| | **Input Impedance** | 50 ohms |
| | **Lightning Protection** | DC Ground |
| Mechanical | | |
| | **Dimensions (LxWxD)** | 30.5” x 24.9” x 6.6” (776 mm x 633 mm x 167 mm) |
| | **Survival Wind Speed** | > 150 mph (> 241 kph) |
| | **Front Wind load** | 162 lbs (722 N) @ 100 mph (161 kph) |
| | **Side Wind Load** | 46 lbs (206 N) @ 100 mph (161 kph) |
| | **Equivalent Flat Plate Area** | 6.3 $ft^2$ (0.6 $m^2$) |
| | **Weight*** | 41.6 lbs (18.9 kg) |
| | **Connector** | 6 x 7-16 DIN female long neck or 4.3-10 female |
| | **Mounting Pole** | 2 to 5 in (5 to 12 cm) |

* Weight excludes mounting

**CONTACT US**
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