

Directional MiMo LTE Wall Mount

Solution: Cradlepoint Certified Fixed Site Antenna ■ **Application:** Branch / Primary / Failover / Retail

The Directional MiMo LTE Wall Mount Antenna is a high directional gain 2x2 MiMo signal boosting antenna for 2G/3G/4G LTE networks using Cradlepoint AER2200, AER1600 and CBA850 Series routers. Incorporating two separately fed wideband elements in a single housing the antenna is equipped to provide client side MiMo and diversity support for 2G/3G/4G LTE networks. With 6dBi of peak gain at 698-960MHz and 9dBi peak gain at 1710-2700MHz the antenna provides extra gain for next generation networks.

The rugged, weather resistant housing is designed for wall mounting with wall and mast mount brackets are provided. Supplied with fitted 5m/16ft low loss double shielded twin cables, the antenna minimizes exposed connector joints and simplifies cable management for easy installation.

The antenna is a cost effective value added product for network operators and service providers ensuring a stable link with improved data rates.



Electrical Data

| | | |
|--|----------------|-------------------------|
| Frequency Range | Elements 1 & 2 | 698-960 / 1710-2700 MHz |
| Operational Bands | | 2G/3G/4G LTE |
| Radiation Pattern | | Directional |
| Nominal Polarization | | Vertical |
| Peak Gain (Excl. Cable Loss) | 698-960 MHz | 6dBi |
| | 1710-2170 MHz | 9dBi |
| | 2396-2700 MHz | 6dBi |
| Efficiency (Excl. Cable Loss - All Bands) | | > 65% |
| Correlation Co-efficient (All Bands) | | < 0.05 |
| Nominal Impedance | | 50 Ω |
| Max Input Power | | 20W |

* Peak gain simulated off a ground plane and does not include cable attenuation

Mechanical Data

| | | |
|-----------------------|--------|-----------------------------------|
| Dimensions | Height | 230mm (9") |
| | Width | 180mm (7.1") |
| | Depth | 94mm (3.7") |
| Operating Temperature | | -40° / 176°C (-30° / +80°F) |
| Material | | U.V. Stable, Impact Resistant ASA |
| Color | | RAL9010 (Pure White) |
| Ingress Protection | | IP66 |
| Weight | | 1130g |

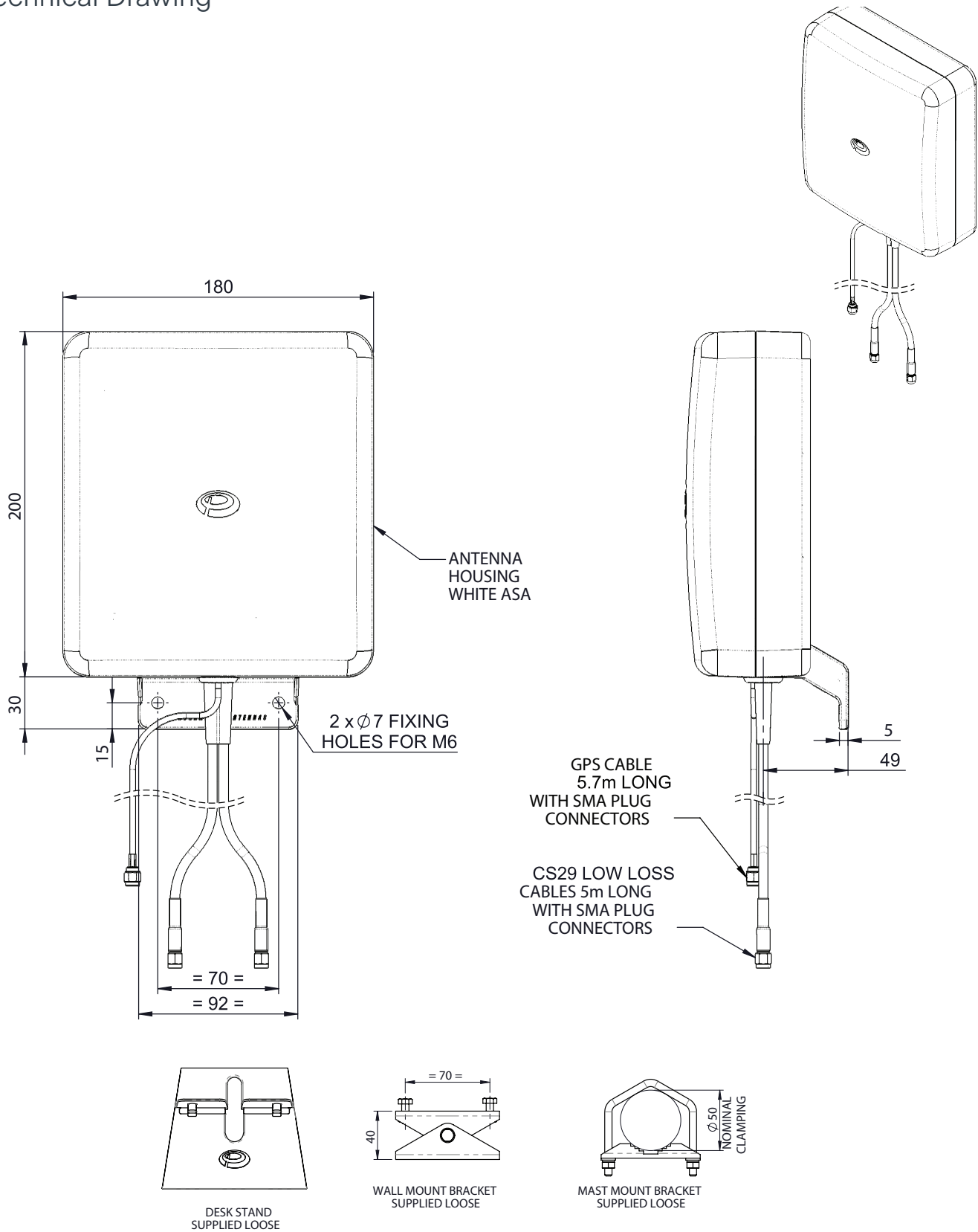
Cable Data

| | |
|-------------|-------------------------|
| | Cell |
| Type | Double Shielded RG58 |
| Length | 16ft (5m) |
| Termination | SMA Plug |

Mounting Data

| | |
|------------------------------|---|
| Mounting Type | Wall Mount / Mast Mount / Desk Mount |
| Pole Diameter | 0.78 - 1.96" (20-50mm) |
| Mounting Bracket Material | Stainless Steel / Aluminium |

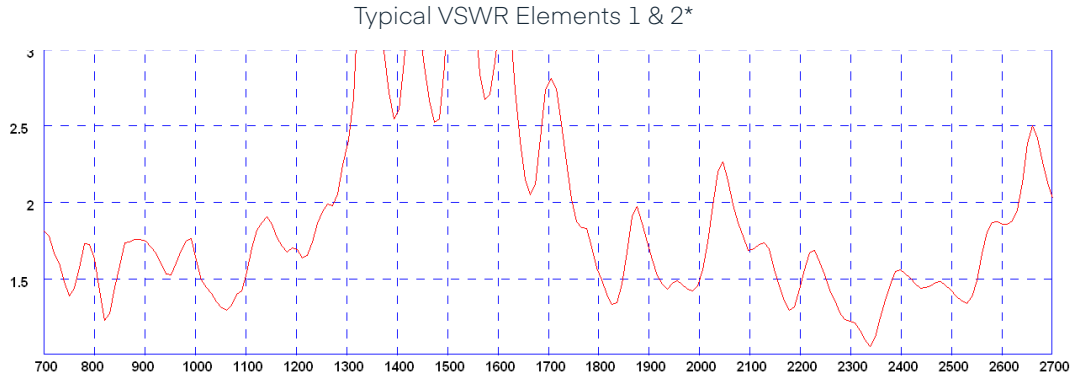
Technical Drawing



Electrical Data

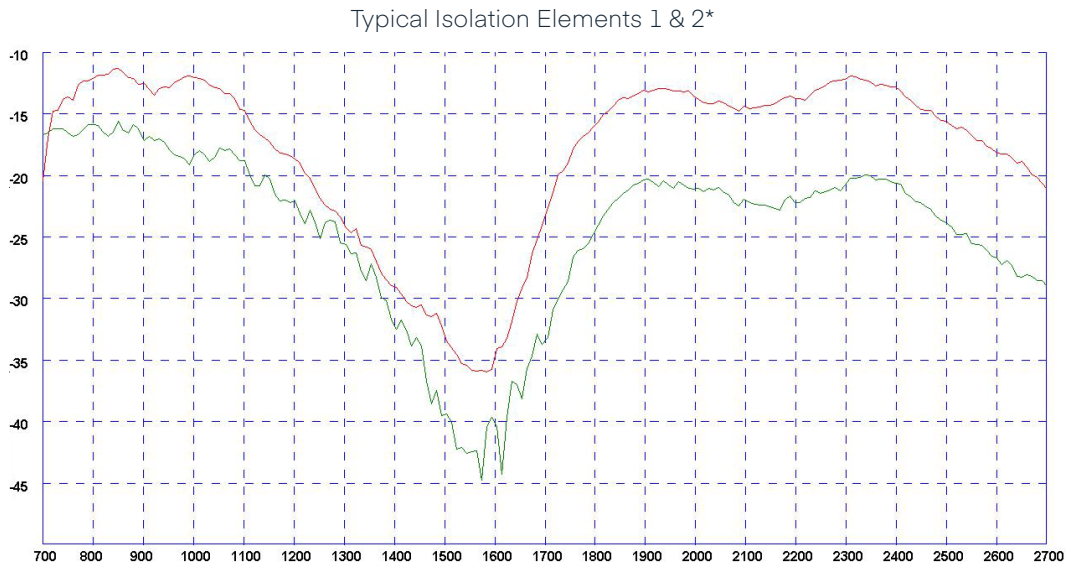
Typical VSWR

*VSWR measured with 0.5m (20") of CS29 cable.



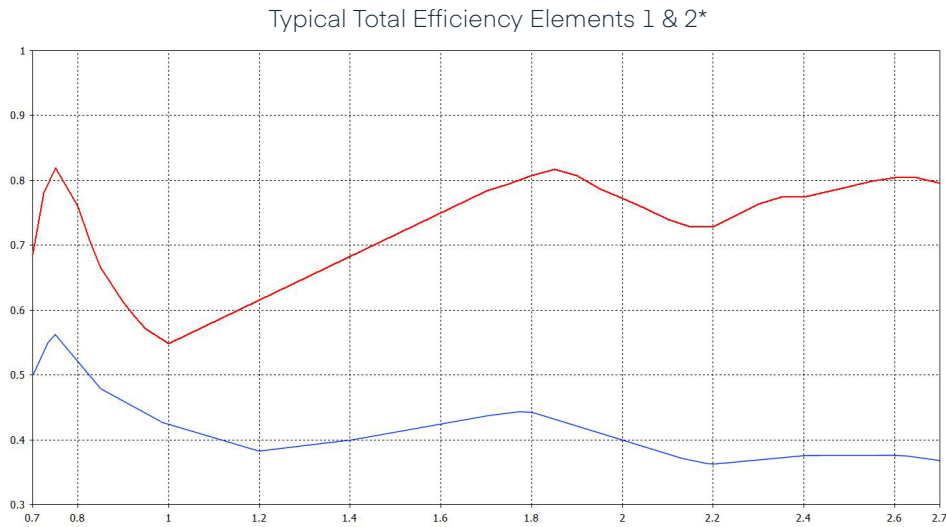
Isolation

*Green Trace = typical isolation with 5m (16') of CS29 cable Red Trace = typical isolation without cable simulated in CST Microwave Studio.



Efficiency

*Blue Trace = typical total efficiency with 5m (16') of CS29 cable Red Trace = typical total efficiency without cable simulated in CST Microwave Studio.

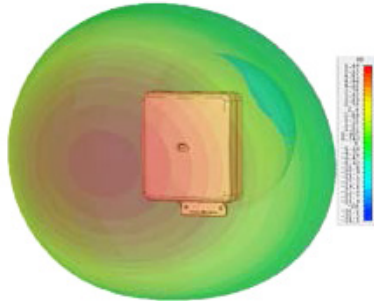


Radiation Patterns

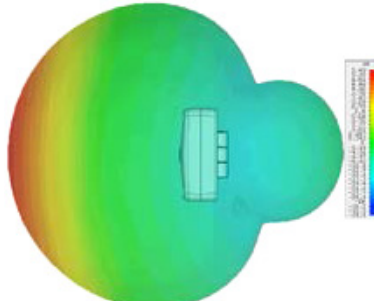
3D Radiation Patterns - 2G/3G/4G LTE Elements 1 & 2*

*All pattern and gain measurements simulated in CST studio without additional cable.

3D Gain Plot Side (725MHz)



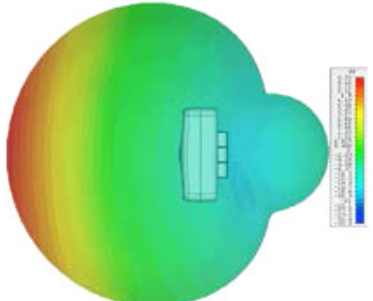
3D Gain Plot Side (725MHz)



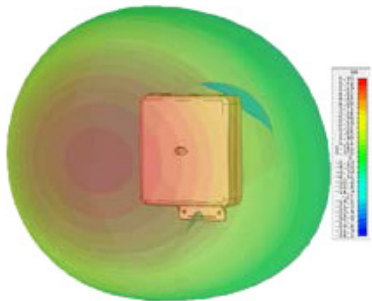
3D Gain Plot Side (825MHz)



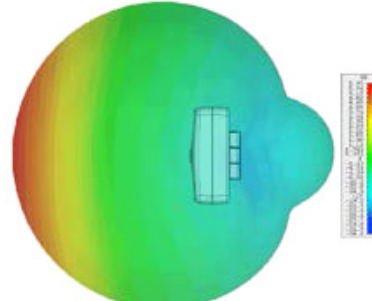
3D Gain Plot Side (825MHz)



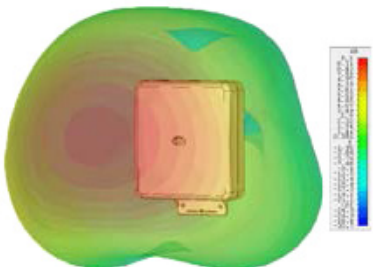
3D Gain Plot Side (925MHz)



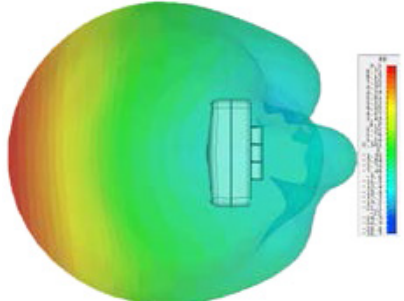
3D Gain Plot Side (925MHz)



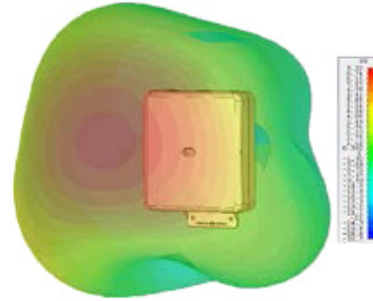
3D Gain Plot Side (1750MHz)



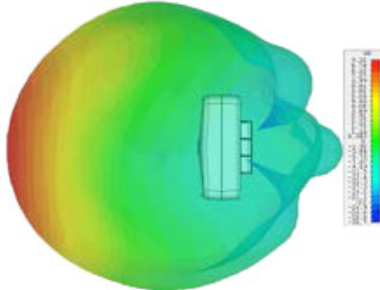
3D Gain Plot Side (1750MHz)



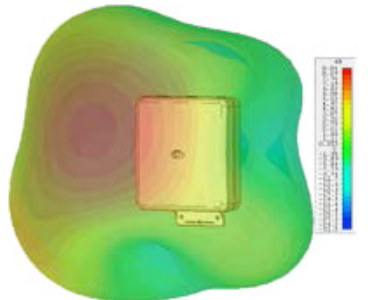
3D Gain Plot Side (1850MHz)



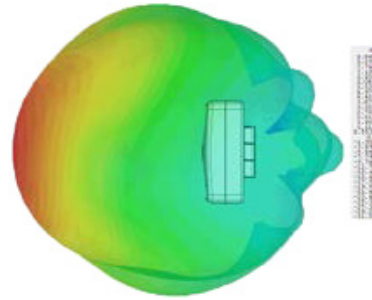
3D Gain Plot Side (1850MHz)



3D Gain Plot Side (1950MHz)

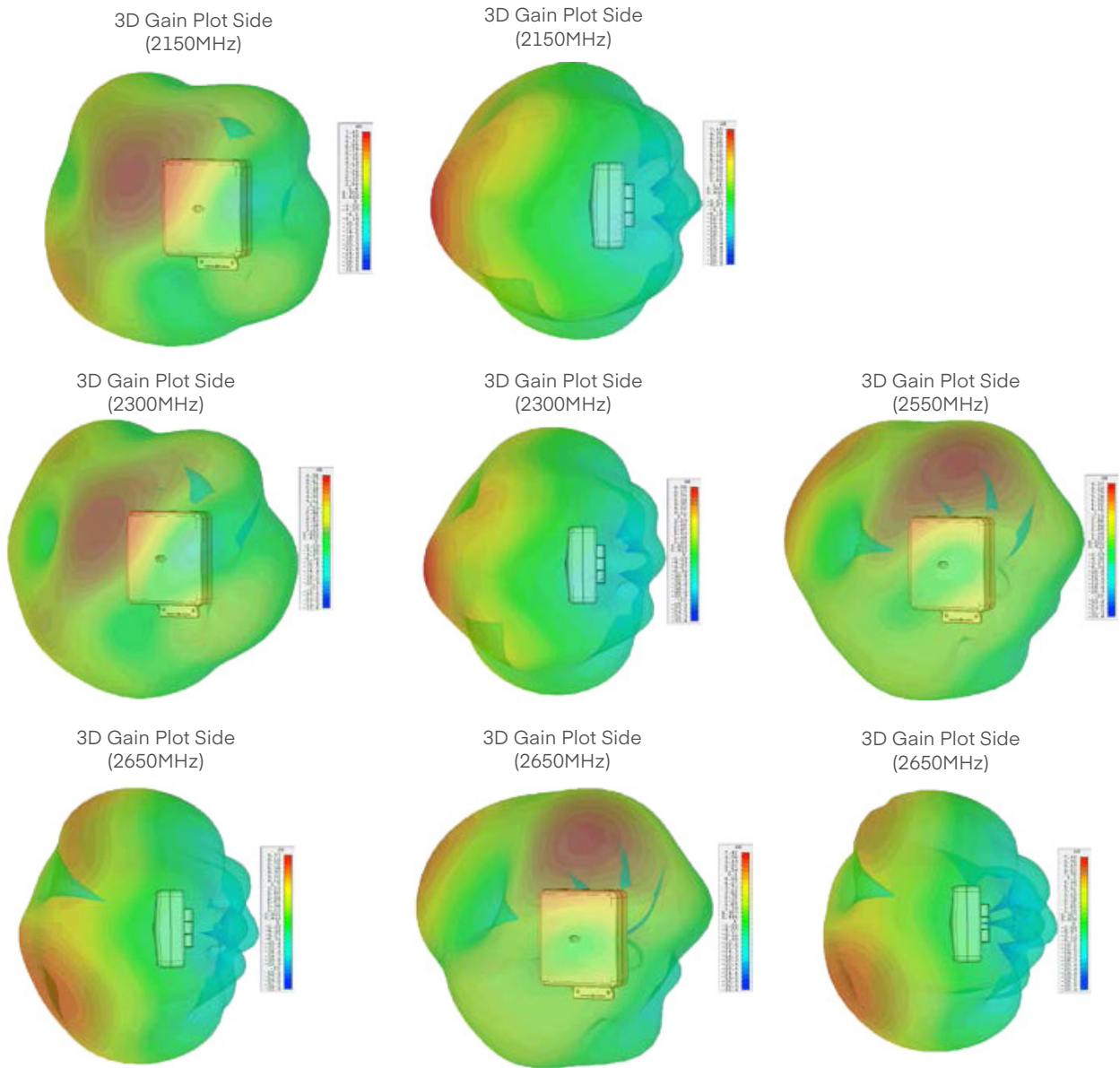


3D Gain Plot Side (1950MHz)



Radiation Patterns

*All pattern and gain measurements simulated in CST studio without additional cable.



Learn more at <https://cradlepoint.com/fixed-antennas>