

High Gain MiMo Cross Polarised Panel LTE Aerial 698 -2700 MHz

Designed to improve mobile signal reception around the home, this aerial works on 4G, 3G and 2G networks and it is suitable for both urban installations and rural or remote areas.

Box contents:

- MiMo panel array.
- Aerial pre-fitted with 2 x 5m of coaxial cable with male SMA connectors.
- Pole mounting bracket and kit.

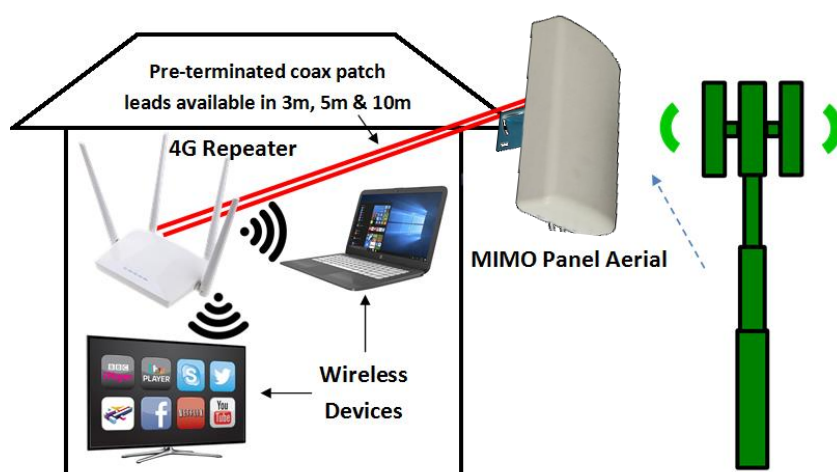
Tools Required:

- 10mm spanner.

Features:

- High gain directional MiMo aerial for a more stable connection.
- Suitable for LTE 4G & 5G. Backwards compatible for 2G and 3G.
- Broadband for multiple operating frequencies (EE/02/Three/Vodafone/BT).
- Two cross polarized MiMo aerials in one enclosure.
- Small enclosure, wall mountable.
- Lightweight, Waterproof & UV stable.
- 2 x 5m LMR200 cables, low loss for connecting to a suitable router/repeater.

Application of the aerial:



Advantages of MiMo aerial:

MiMo stands for Multiple-input multiple-output.

While it involves multiple technologies, MiMo can essentially be boiled down to one single principle; a wireless network that allows the transmitting and receiving of more than one data signal simultaneously over the same radio channel.

The advantage of a MiMo network over a regular one is that it can multiply the capacity of a wireless connection without requiring more spectrum.

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Which mobile phone providers is the aerial compatible with?

This LTE MiMo panel is designed to work on all mobile providers across 698-2700 MHz and is compatible with the following transmissions **GSM, DCS, UMTS, HSDPA, LTE (4G/5G)**.

Mobile phone cellular frequency spectrum:



EE

800MHz (4G) Band 20
1800MHz (2G & 4G) Band 3
2100MHz (3G) Band 1
2600MHz (4G) Band 7



Three

800MHz (4G) Band 20
1800MHz (4G) Band 3
2100MHz (3G) Band 1



Vodafone

800MHz (4G) Band 20
900MHz (2G & 3G) band 8
1800MHz (2G) Band 3
2100MHz (3G) Band 1
2600MHz (4G) Band 7



O2

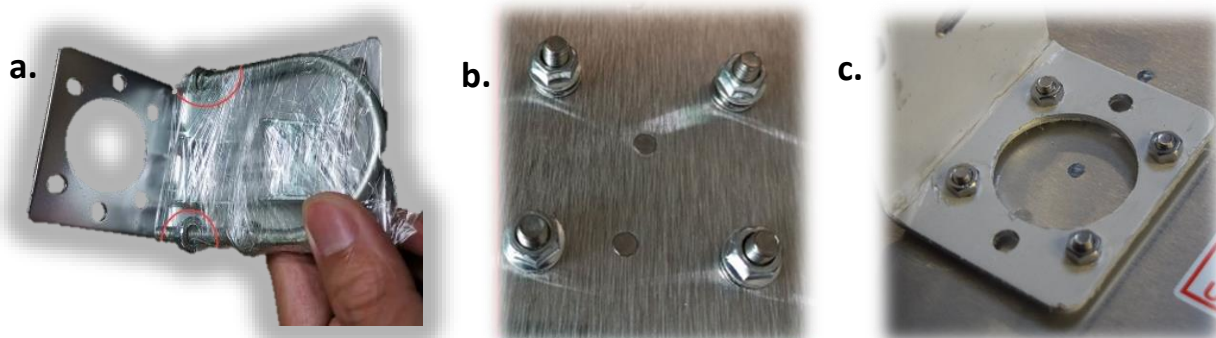
800MHz (4G) Band 20
900MHz (2G & 3G) Band 8
1800MHz (2G) Band 3
2100MHz (3G) Band 1

Installation Instructions:

1. Fitting the mounting bracket to the back of the aerial.

The aerial is supported with the L shaped bracket (figure a.).

- i. Carefully place the aerial face down on an appropriate surface, as not to scratch the front.
- ii. Remove the four nuts in figure b. and place the short length of the L shaped bracket over the bolts and push into position.
- iii. Replace and tighten the nuts on the bolt, as in figure c.

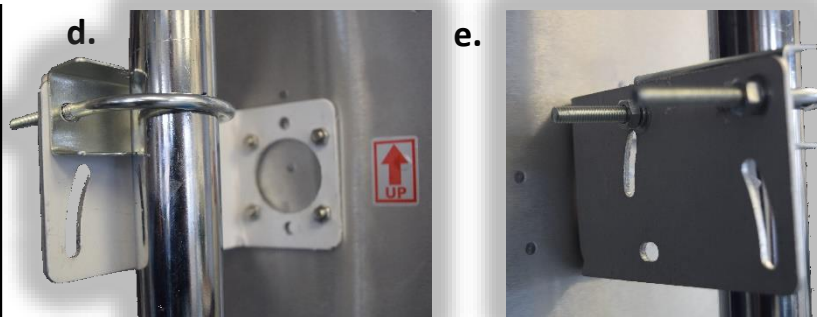


2. Mounting the aerial to the mast-please take note of the safety notice below.

- i. Use the following link: www.mastdata.com to find the relevant mobile phone transmitter.
- ii. Using a suitable mast and bracket, locate the panel in the optimum location for alignment to the transmitter.
- iii. Fix the panel to the mast using the kit provided, as shown in figure d. and figure e.

Safety

Working at height – carry out work outdoors at height only if you are competent in the use of ladders and related access equipment. Always work safely within your own limitations, ensuring that all equipment is appropriate and is in good condition.



3. Routing to the cable to the router/repeater.

Keeps all runs to an absolute minimum but if need for practical reasons, see our range of SMA cable extension in the accessory products on Page 4.



- i. Run the cables to the router, ensuring not to damage the cables when clipping as this will impair the performance.
- ii. Remove the 2 stub aerials from the repeater and fit the SMA connector of the twin cables directly to the inputs. If an SMA adaptor is needed, please see our range in the accessory products on Page 4.
- iii. Using test equipment to validate the aerials performance after the installation is advised.

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Additional accessories you may need...

Installation products:

AC40 - 3' Eaves Kit	BLAFIX10 - Fixing Bolts
	

Extension cables:

LMR200 RF Coax Cable Patch Lead SMA Female to SMA RP Female. 3m - PROLMRSMA030M 5m - PROLMRSMA050M 10m - PROLMRSMA100M	LMR200 RF Coax Cable Patch Lead SMA RP Female Jack to SMA RP Male Plug. 3m - PROLMRSMARP030M 5m - PROLMRSMARP050M 10m - PROLMRSMARP100M
	

SMA connector range:

PROCON80 - SMA Plug Male to SMA-RP Female Jack Gold connector 50 ohm	PROCON81 - SMA Female Jack To RP-SMA Male Plug Gold Connector 50 ohm Straight RF Coaxial Adaptor	PROCON82 - SMA female to F type male connector Straight RF Coaxial Adaptor Gold SMA connector 50 ohm
		

Technical Performance Details:

Electrical Parameters			
Frequency Range (MHz)	698-806	806-960	1710-2700
Gain (dBi)	10	11	12
VSWR	<2.0	<1.5	<1.8
Input Impedance (Ω)	50		
Polarisation	+45°		
Horizontal 3dB Beamwidth (°)	360		
Vertical 3dB Beamwidth (°)	85-35		
Max. Input Protection (W)	50		
Isolation (dB)	>18		
Connector	2 x Male SMA		
Lighting Protection	DC Ground		
Mechanical Parameters			
Antenna Dimensions (mm)	295 x 180 x 70		
Weight (Kg)	1.0		
Cover Material	ABS		
Operating Temperature (°C)	-40 - +60		