# 5G High Gain MiMo Cross Polarised Panel LTE Aerial 698 -3800 MHz

5GLTE-698-3800-PAN



Designed to improve mobile signal reception around the home, this aerial works on 5G, 4G, 3G and 2G networks and it is suitable for both urban installations and rural or remote areas.

### **Box contents:**

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

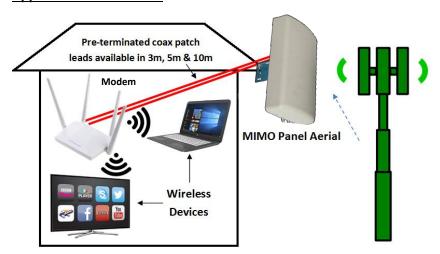
#### **Tools Required:**

10mm spanner.

#### **Features:**

- High gain directional MiMo antenna for a more stable connection.
- Suitable for LTE 5G. Backwards compatible for 2G, 3G and 4G.
- Broadband for multiple operating frequencies (EE/02/Three/Vodaphone/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.
- New fractal antenna design.

# **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).

# **Current UK mobile spectrum holdings**



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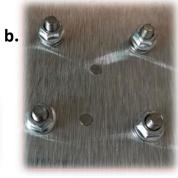
#### **Installation Instructions:**

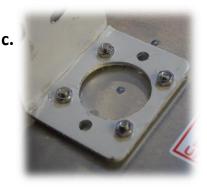
# 1. Fitting the mounting bracket to the back of the aerial.

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: <a href="www.mastdata.com">www.mastdata.com</a> 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 I 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:**



### **Extension cables:**

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

### **SMA** connector range:

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

# **Technical Performance Details:**

Frequency range(MHz)	698-960/1710-2170/2500-2700/3500-4000MHz/1710~2700/ 2900-4000Mhz		
Gain(dBi)	12/14 DBi		
VSWR	≤1.8		
Polarization	Vertical and Horizontal		
Isolation(dB)	20		
Input Impedance	50Ω		
Horizontal Beamwidth (°)	90	90	65
Vertical Beamwidth (°)	75	70	60
Input Power per Port(W)	100		
Connector	SMA Male		
Dimensions(mm)	295X180X70		
Weight(kg)	0.8		
Cover Material	ABS		
Installation method	Pole mount		
Pole diameter	Ø30~Ø50mm		
Operating Temperature(°C)	-40~+70		

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