



Product Data Sheet

WS-MGLP-7-58

Low Profile MiMo LTE Antenna
with MiMo WiFi and GPS



LTE MIMO Antenna

Low Profile MIMO Antenna with GPS



Rugged low profile design

2 x Wideband LTE/cellular elements

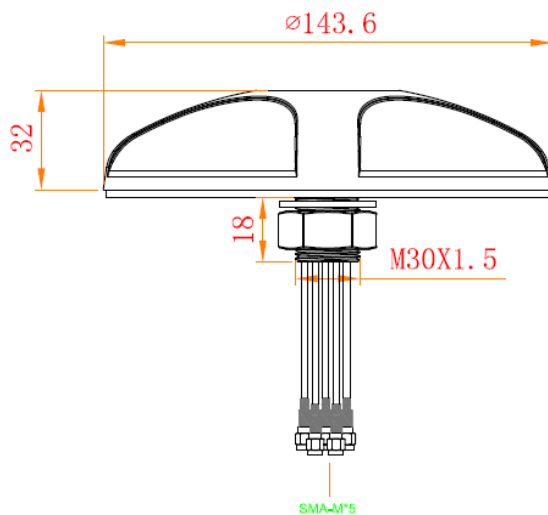
2 x 2.4 & 4.9-6GHz WiFi/WiMAX Elements

Integrated GPS antenna

This low profile MIMO antenna has been designed to support the new generation of LTE routers.

The antenna enclosure contains five isolated high performance antenna elements; two ultra-wideband elements covering 698-2700MHz supporting MiMo/diversity at cellular/LTE frequencies and two dual band elements covering 2.3-2.7 & 4.9-6GHz supporting MIMO/diversity operation for WiFi. It also contains a high performance GPS antenna with an integrated 26dB gain LNA and high quality filtering to combat noise.

The antenna does not require a metallic ground plane, and maintains a high level of performance even when mounted on a non-metallic surface.



LTE MIMO Antenna

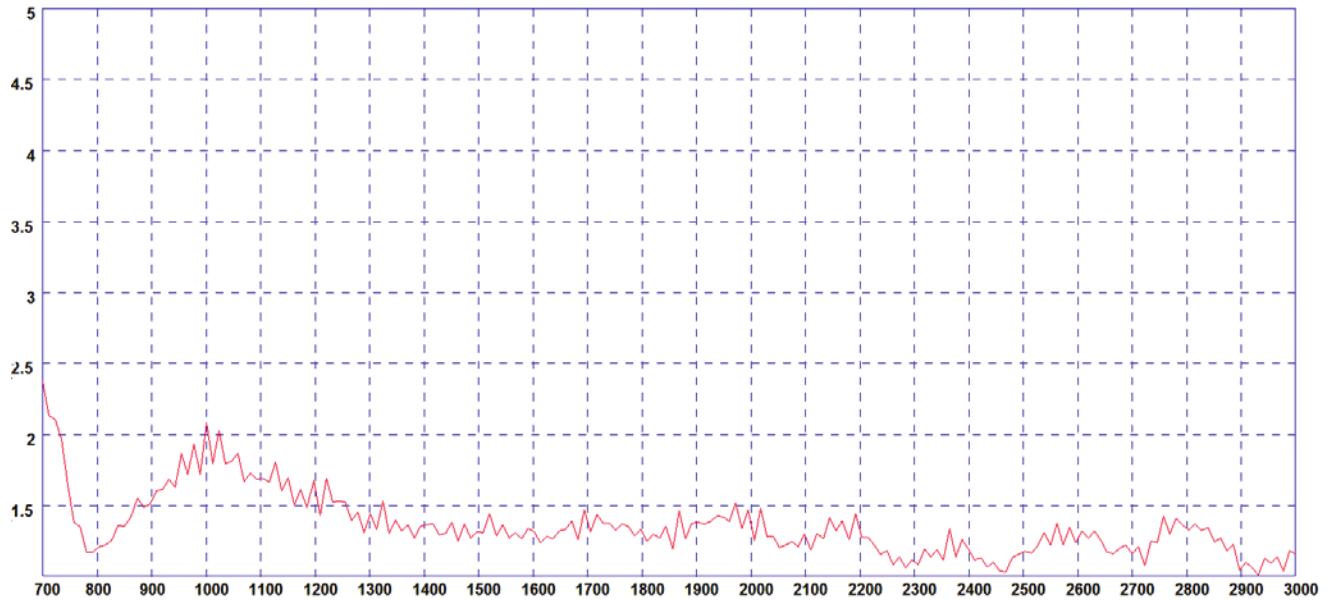
Low Profile MIMO Antenna with GPS

Part No.		WS-MGLP-7-58
Electrical Data		
Frequency Range (MHz)	Elements 1 & 2	698-960 / 1700-2700
	Elements 3 & 4	2.3-2.7 / 4.9-6GHz
Operational Bands	Elements 1 & 2	LTE / Cellular
	Elements 3 & 4	WIFI / WiMAX
Peak Gain: Isotropic	Elements 1 & 2 -698-960	3dBi
	Elements 1 & 2 -1700-2700	3dBi
	Elements 3 & 4	3dBi
VSWR	Elements 1 & 2	< 1.5:1
	Elements 3 & 4	< 1.5:1
Isolation (in free space)	Elements 1 & 2	> 15dB
	Elements 3 & 4	> 20dB
Polarisation		Vertical
Impedance		50Ω
Max Input Power (W)		50
GPS Data		
Frequency Range (MHz)		1575 - 1612
VSWR		<2.0:1 ± 4MHz
Gain: LNA		26dB
Polarisation		Right Hand Circular
Operating Voltage		3 - 7V DC (fed via coax)
Current		Typical 14mA
Mechanical Data		
Dimensions	Height	32mm
	Diameter	144mm
Operating Temp		-22° / 176°F (-30° / +80°C)
Material		A.S.A
Colour		Black
Mounting Data		
Mounting type		Panel mount
IP rating		IP67
Cable Data		
GPS Cable	Type	RG174
	Diameter	2.8mm
	Length	3.0 mtr
	Termination	SMA (male)
Cell / LTE Cables x2	Type	CFD195 (double shielded RG58)
	Diameter	5mm
	Length	3.0 mtr
	Termination	SMA (male)
WIFI / WiMAX Cables x2	Type	CFD195 (double shielded RG58)
	Diameter	5mm
	Length	3.0 mtr
	Termination	SMA RP (m)

LTE MIMO Antenna

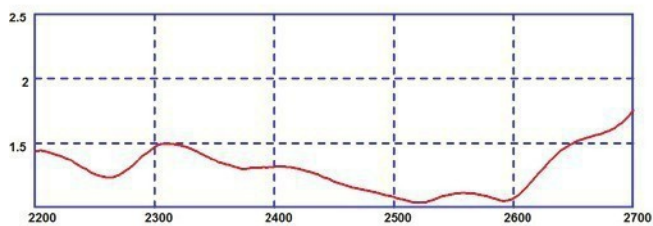
Low Profile MIMO Antenna with GPS

Typical VSWR cellular / LTE elements*



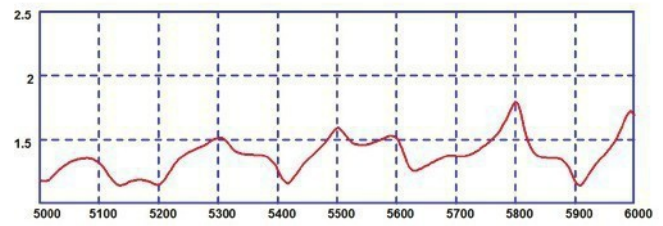
* VSWR measured in free space with 3m of CFD195 cable.

Typical VSWR WIFI elements 2.4GHz*

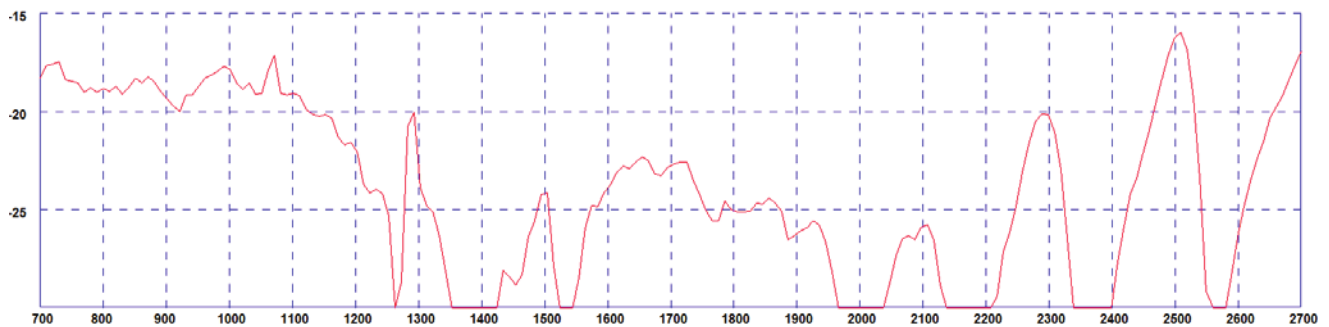


* VSWR measured with 3m of cable.

Typical VSWR WIFI elements 5GHz*



Typical Isolation cellular / LTE elements*



* Isolation measured in free space with 300mm of cable.