

# External / In-building 5G/4G Stick Monopole Antenna

W1696/W1697/W1696-M - 617 to 3800 MHz (Several 5G FR1 bands)



## Applications:

- Ⓜ Small form factor monopole
- Ⓜ 4G LTE/LTE-A, 5G NR
- Ⓜ LTE CAT1M
- Ⓜ NBIoT
- Ⓜ CBRS US B48
- Ⓜ Gateways, Set Top boxes
- Ⓜ Telemetry, High speed data
- Ⓜ IoT and M2M solutions

### Electrical Specifications @ 25°C - Operating Temperature -30°C to +85°C<sup>1</sup>

Frequency Bands: 617-960/1710-2690/3400-3800 MHz

Antenna <sup>2</sup> Type	Nominal Impedance	Return Loss	Radiation Pattern	Polarization	Power Withstanding
Monopole	50Ω	per below	Omni	Linear	5W
Frequency		<b>617-960 MHz</b>	<b>1710-2690 MHz</b>	<b>3400-3800 MHz</b>	
Return Loss		<-5 dB	<-5 dB	<-4 dB	
Peak Gain		>-0.5 dBi	>1 dBi	>0 dBi	
Efficiency		40%	45%	30%	

### Mechanical Specifications

Orderable PN: W1696, W1696-M, W1697

Part Number	Size (Length * Dia)	Color	Weight	Connector Type	Ingress Protection
W1696	49.6 * 10	Black	7.5grms	SMA Male	IP42
W1697	49.6 * 10	Black	7.5grms	RP - SMA Male	IP42
W1696-M	50 * 12	Black	7.8grms	SMA Male	IP65

#### Notes:

1. Storage Temperature: -30°C to 85°C
2. Measured on 305mm (12") SQ ground plane
3. LTP600/71DMN comes in black for white add the suffix W and PN becomes LT600/71DMNW
4. 15.9mm (0.625") hole required

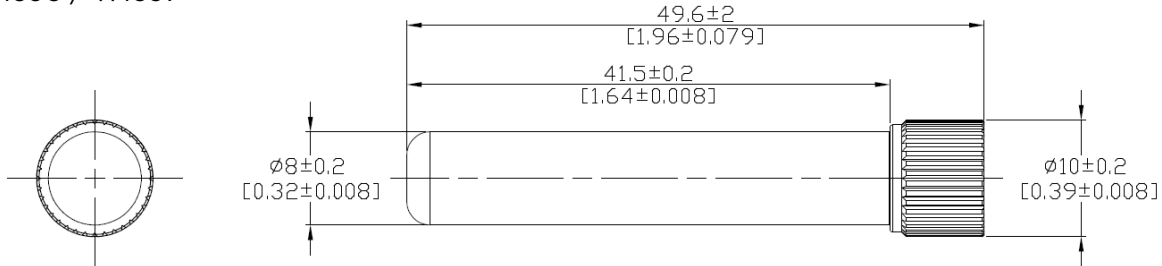
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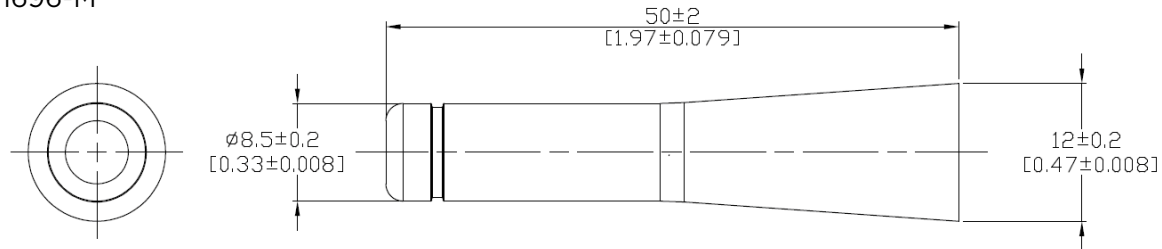
## Mechanical

### W1696/W1697/W1696-M

W1696 / W1697



W1696-M



### Packaging Info:

1pcs antenna per PE bag  
24pcs PE bags per tray  
14pcs trays per package box(2 pcs empty tray)  
288pcs antenna per package  
Package box: 460mm\*235mm\*140mm

**Dimensions:**  $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified,  
all tolerances are  $\pm \frac{.010}{0.25}$

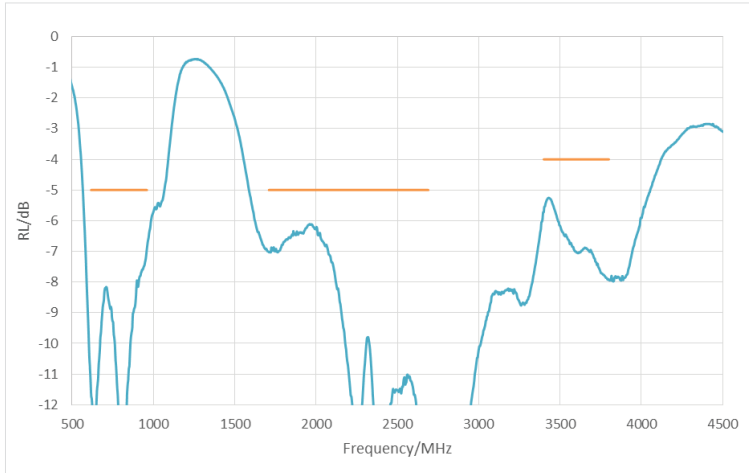
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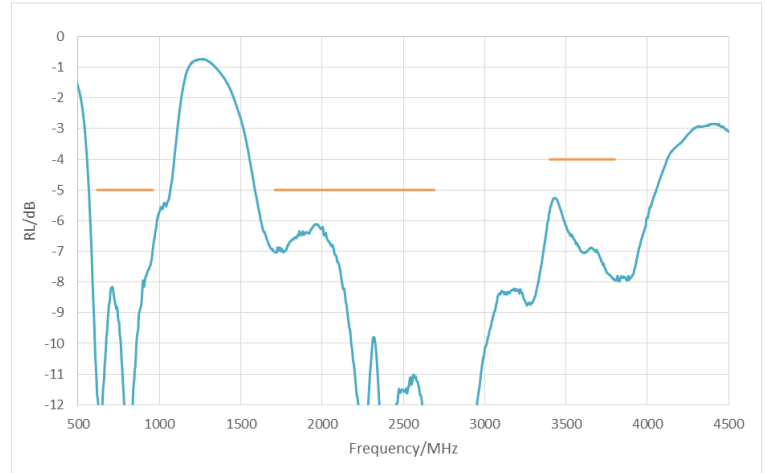
## Charts

W1696/W1697/W1696-M

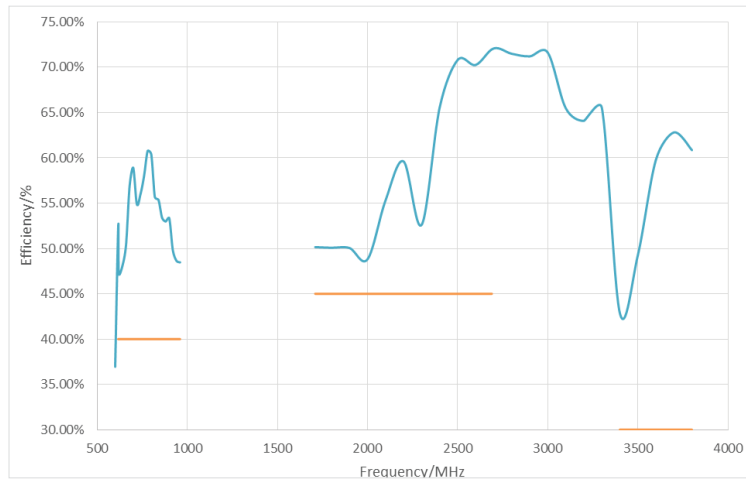
### Return Loss vs Frequency



### Peak Gain vs Frequency



### Radiation Efficiency vs Frequency

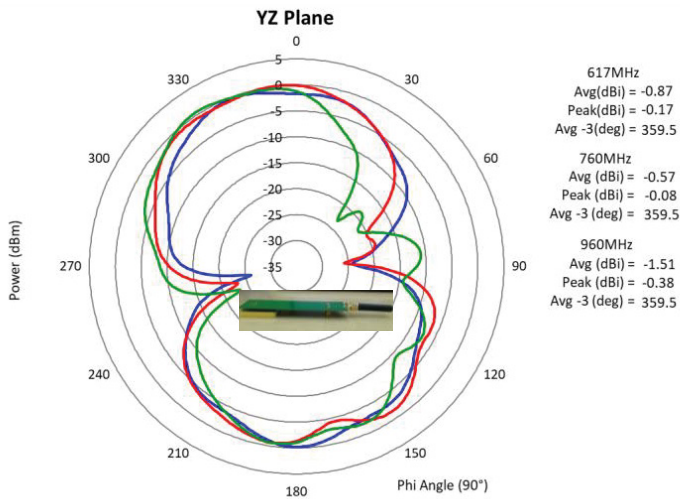
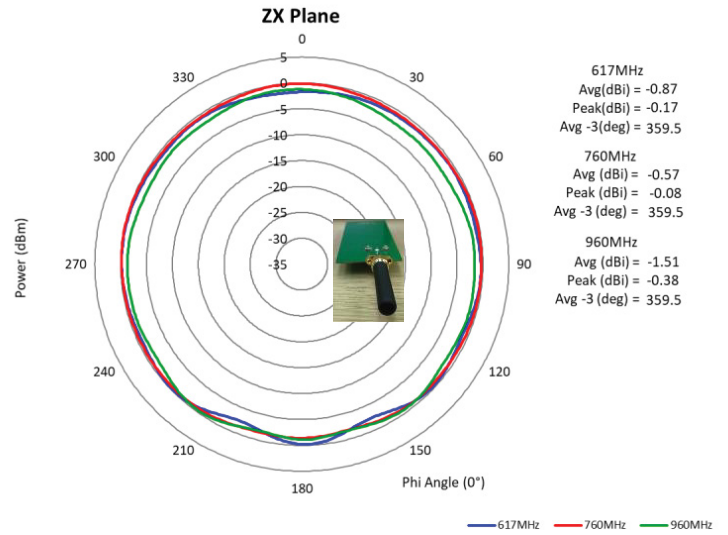
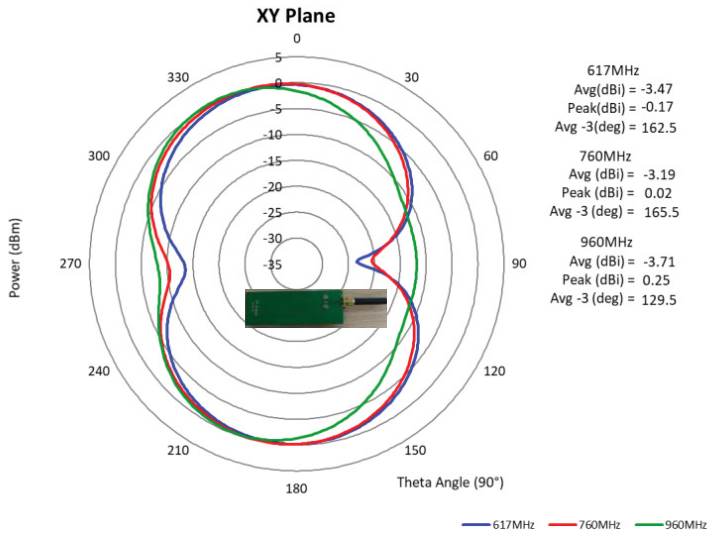


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## Free Space Radiation Pattern

617MHz - 960MHz

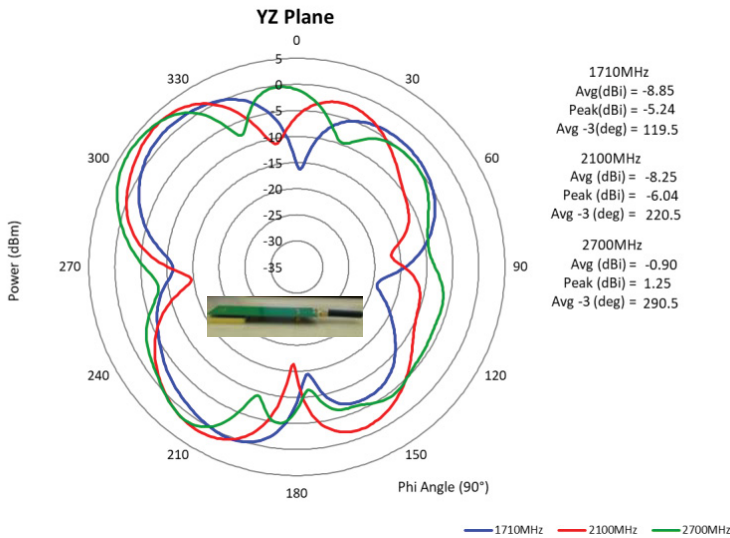
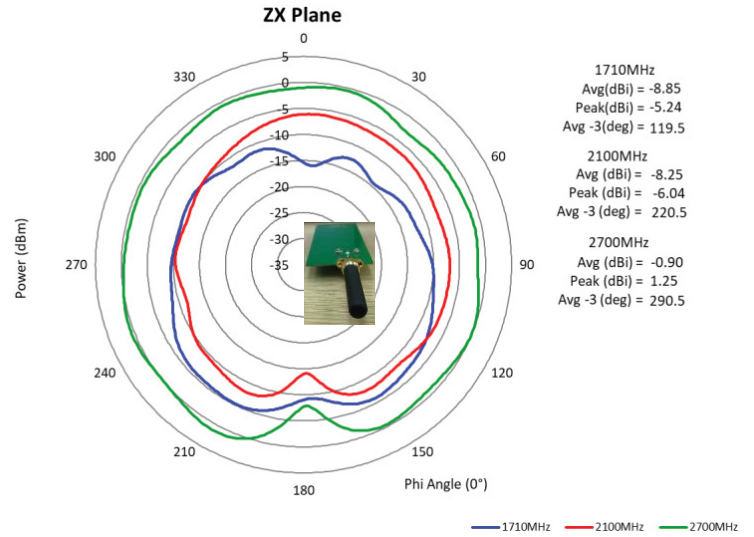
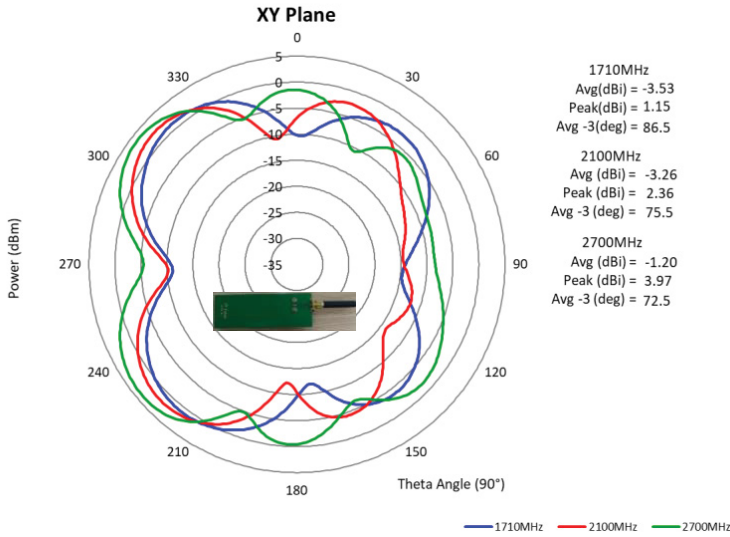


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W1696/W1697/W1696-M - 617 to 3800 MHz (Several 5G FR1 bands)

## Free Space Radiation Pattern

1710MHz - 2690MHz

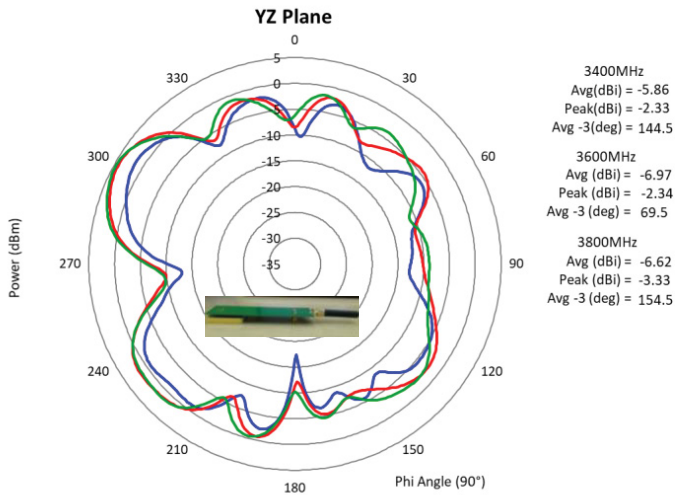
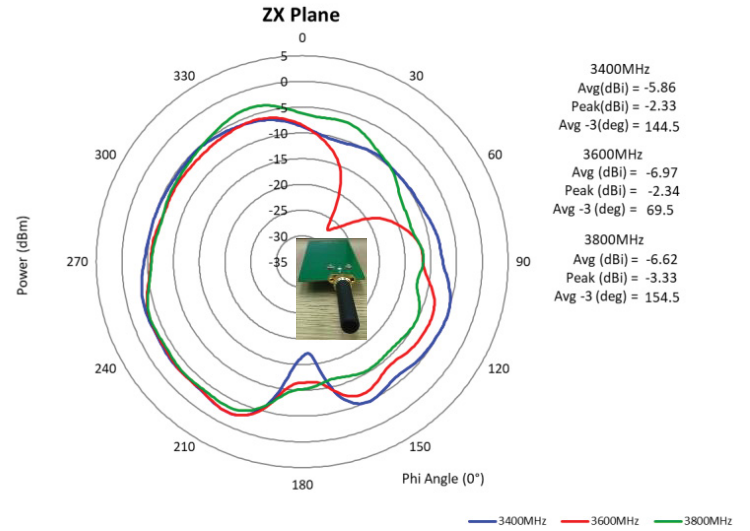
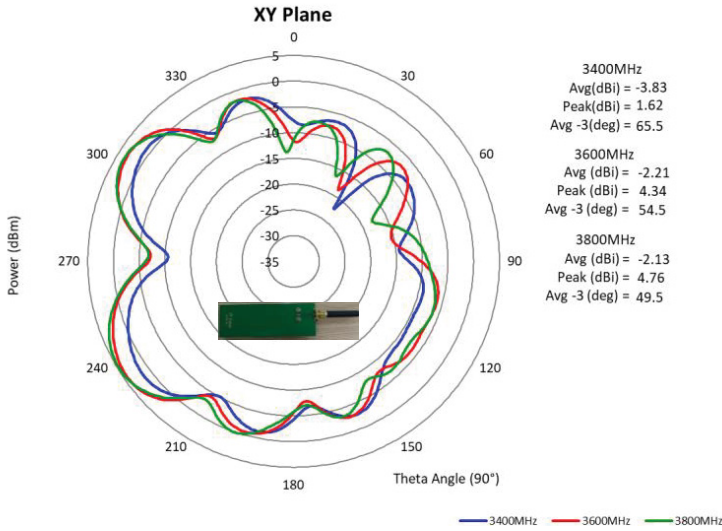


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## Free Space Radiation Pattern

3400MHz - 3800MHz



### For More Information:

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