

SPECIFICATION

Part No. : GW26.0112

Product Name : 2.4GHz Miniature Terminal Mount Monopole

Antenna

: SMA(M)R/A Connector Feature

28.5 * 17.2mm

ROHS Compliant





1 Introduction

The GW.26 2.4GHz Monopole SMA(M)R/A terminal mount antenna is ideal for 2.4GHz wireless applications such as Bluetooth® and Wireless LAN.

Many module manufacturers specify peak gain limits for any antennas that are to be connected to that module. Those peak gain limits are based on free-space conditions. In practice, the peak gain of an antenna tested in free-space can degrade by at least 1 or 2dBi when put inside a device. So ideally you should go for a slightly higher peak gain antenna than mentioned on the module specification to compensate for this effect, giving you better performance.

Upon testing of any of our antennas with your device and a selection of appropriate layout, integration technique, or cable, Taoglas can make sure any of our antennas' peak gain will be below the peak gain limits. Taoglas can then issue a specification and/or report for the selected antenna in your device that will clearly show it complying with the peak gain limits, so you can be assured you are meeting regulatory requirements for that module.

For example, a module manufacturer may state that the antenna must have less than 2dBi peak gain, but you don't need to select an embedded antenna that has a peak gain of less than 2dBi in free-space. This will give you a less optimized solution. It is better to go for a slightly higher free-space peak gain of 3dBi or more if available. Once that antenna gets integrated into your device, performance will degrade below this 2dBi peak gain due to the effects of GND plane, surrounding components, and device housing. If you want to be absolutely sure, contact Taoglas and we will test. Choosing a Taoglas antenna with a higher peak gain than what is specified by the module manufacturer and enlisting our help will ensure you are getting the best performance possible without exceeding the peak gain limits.

Connector mount is fully customizable. It has a fully IP65 rated waterproof robust housing, ensuring high reliability.



2 Specification

Wi-Fi 2.4GHz		
Frequency	2400~2500MHz	
Bandwidth	100MHz	
Peak Gain	1.8dBi	
Radiation Efficiency	> 40%	
Radiation	Omni-directional	
Polarization	Vertical	
Power Handling 1W Max	Power Handling 1W Max	
Electrical Wave	½ Monopole	
Impedance	50Ω	
Operating Temperature	-40°C ~ +85°C	
Storage Temperature	-40°C ~ +85°C	

3 Mechanical Properties

Mechanical Properties		
Colour	Black and Green	
IP rating	IP-65	
Connector	SMA(M) R/A	

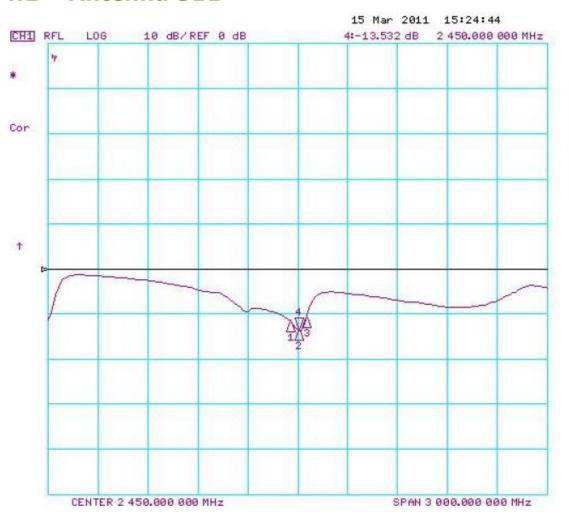


CH1 Markers 1:-11.562 dB 2.40000 GHz

2:-13.532 dB 2.45000 GHz

3:-10.660 dB 2.50000 GHz

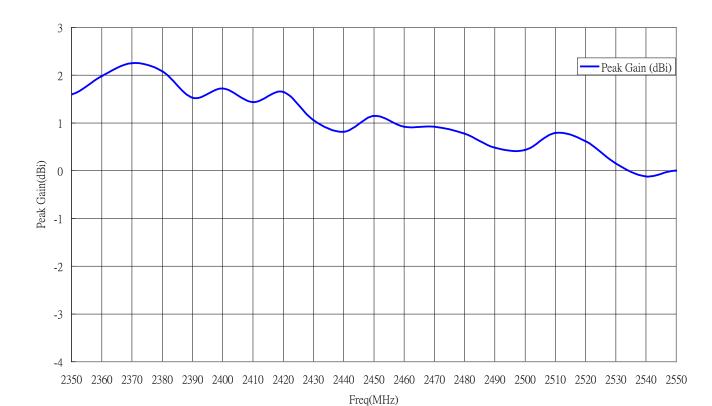
4 Antenna Characteristics 4.1 Antenna S11



SPE-11-8-0036/J/SS Page 4 of 13

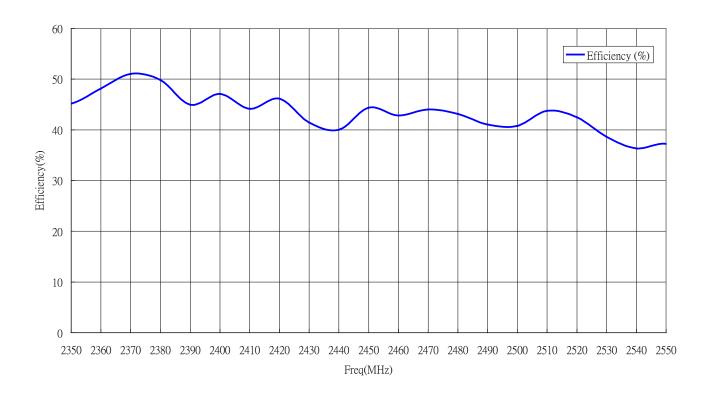


4.2 Antenna Peak Gain



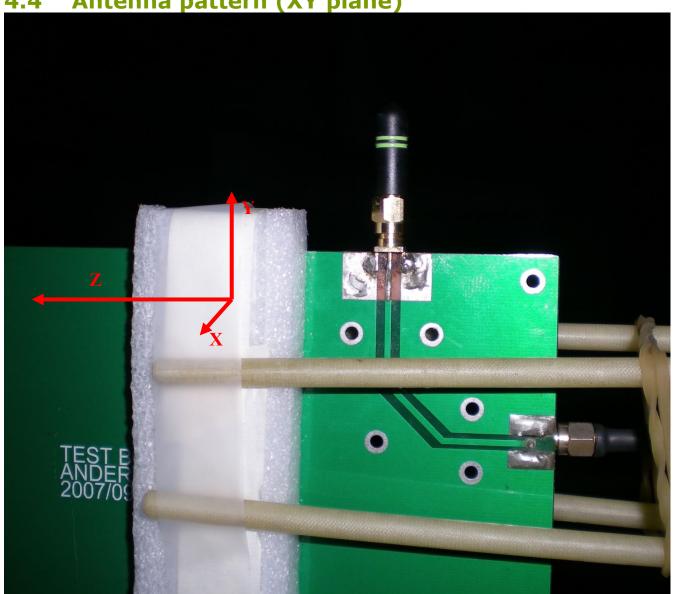


4.3 Antenna Efficiency



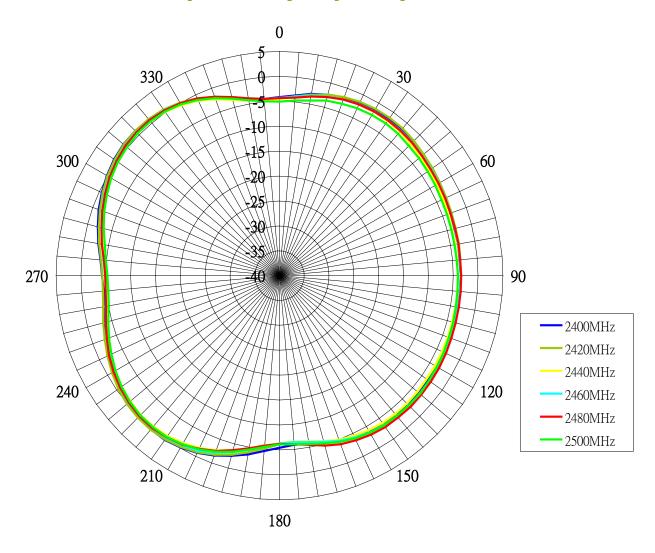


4.4 Antenna pattern (XY plane)



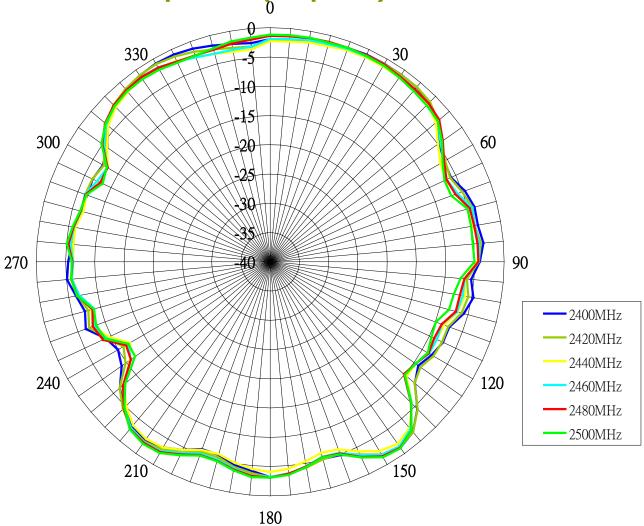


4.5 Antenna pattern (XY plane)



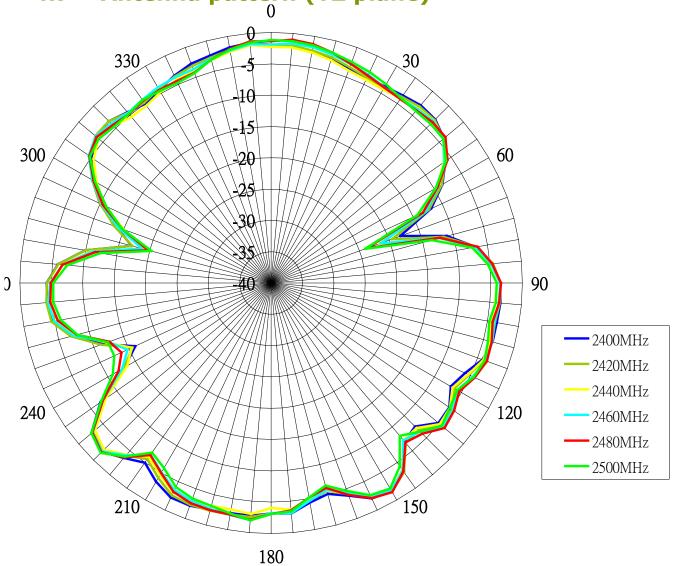


4.6 Antenna pattern (XZ plane)



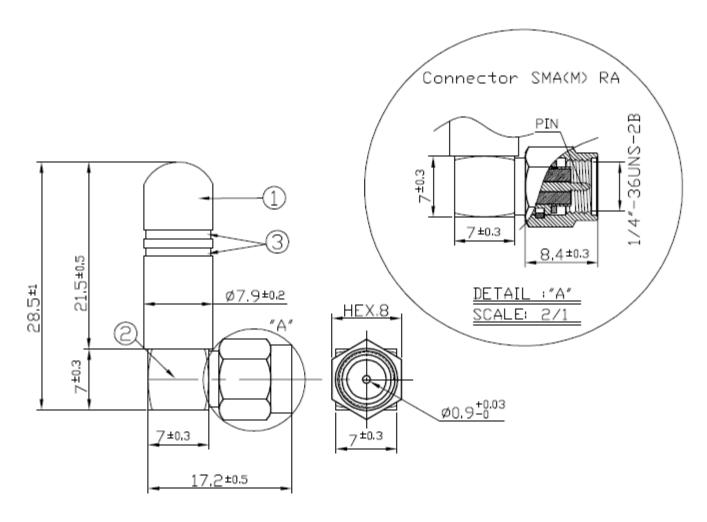


4.7 Antenna pattern (YZ plane)





5. Outline Drawings and Structure



Key

1	Connector	SMA(M)RA Brass
2	Antenna Cover	TPEE (Black)
3	Colour Stripes	Apple Green – Acrylic Paint

6. Packaging



GW.26.0111

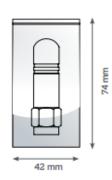
Packaging Specifications

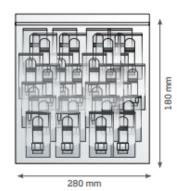
1 pcs GW.26.0111 per PE Bag Bag Dimensions - 74 x 42 mm Weight - 4g

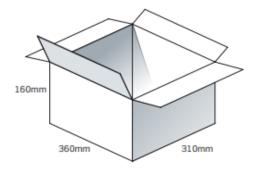
100 pcs GW.26.0111 per PE Large Bag Bag Dimensions - 280x 180mm Weight - 400kg

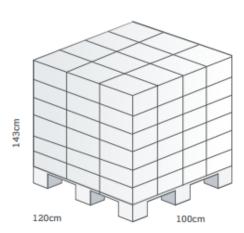
1500 pcs GW.26.0111 per carton Carton - 360x 310 x 160mm Weight - 6.5Kg

Pallet Dimensions 120x 100 x 143cm 72 Cartons per Pallet 12 Cartons per layer 6 Layers











Taoglas makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice.

Taoglas reserves the rights to this document and the information contained herein. Reproduction, use or disclosure to third parties without express permission is strictly prohibited.

© Taoglas