



Explanation of Part Number

WPIANT UGM F R1 200 XX A X
 (1) (2) (3) (4) (5) (6) (7) (8)

Example configuration above:
 UGM: Under Glass Mount (with radome)
 F: GSM 850/1900
 R1: RG178 cable
 200: 200mm long
 06: RA MMCX connector
 A: Revision A



UGM Antenna with radome shown

Note: See last page of datasheet for part number configuration options

Application

The WPIANTUGM and FR4 series antenna is typically used in commercial and industrial (C&I) as well as Residential solid state electric meter automated meter reader applications that use the ISM 900MHz, 2.4GHz or WAN GSM850/1900 or GSM900/1800MHz bands. It's ultra-low profile and flexible circuit dipole construction enables high performance efficiency numbers (installed in meter) typically in excess of 60%. The UGM under glass mount universal antenna housing is an option which ensures a reliable and repeatable method to mount the antenna on a variety of meters and insure optimum alignment and performance in the field. However, this part can be configured with or without it.

WP Wireless can assist your engineers with ensuring the optimum mounting position for these antennas on your application and are experienced in trouble shooting system integration issues such as TRP/TIS and FCC requirements. Please contact sales@wp-wireless.com with your specific application requirements.

Electrical Properties

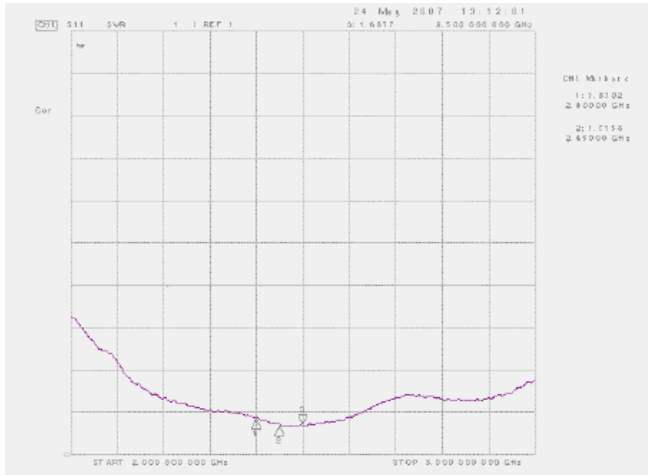
Item	A	B	E		F	
	ISM900	ISM2.4GHz	GSM900/DCS1800		GSM850/PCS1900	
Operating Frequency [GHz]	902 ~ 928MHz	2.40 ~ 2.50GHz	880 ~ 960MHz 1710 ~1880MHz		824 ~ 894MHz 1850 ~1990MHz	
Nominal Impedance [Ω]	50 Ohms					
VSWR (referenced to 50Ω) (Max)	2.0:1	2.0:1	2.5:1		2.5:1	
Peak Gain [dBi] (Typical)	2.8dBi	4.2dBi	2.3dBi	3.1dBi	2.8dBi	2.3dBi
Polarization	Linear					
Pattern	Omni-Directional					
Accepted Power [W] (Max)	2 watts (+33dBm)					

Mechanical/Environmental Properties

Item	Value
PCB	UL 94-V compliant
UGM radome material	PC/ABS
Operating Temperature	-30°C to +80°C
Storage Temperature	-30°C to +80°C
Hazardous Materials	RoHS compliant



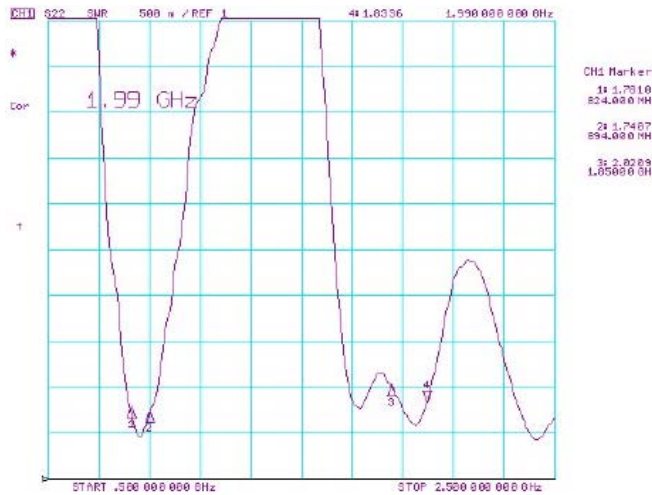
Typical VSWR (Mounted on meter)



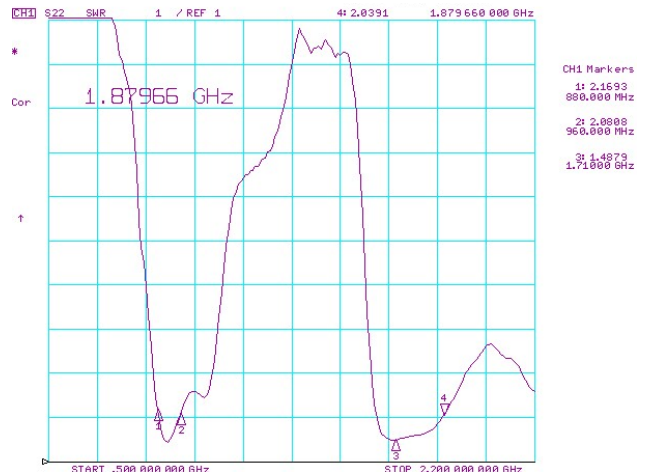
WPIANTUGMB (2.4GHz) Series



WPIANTUGMA (900MHz) Series



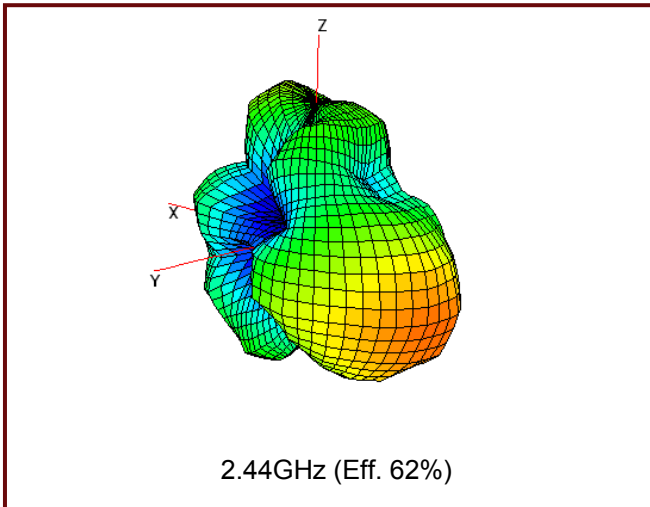
WPIANTUGMF (850/1900MHz) Series



WPIANTUGME (900/1800MHz) Series

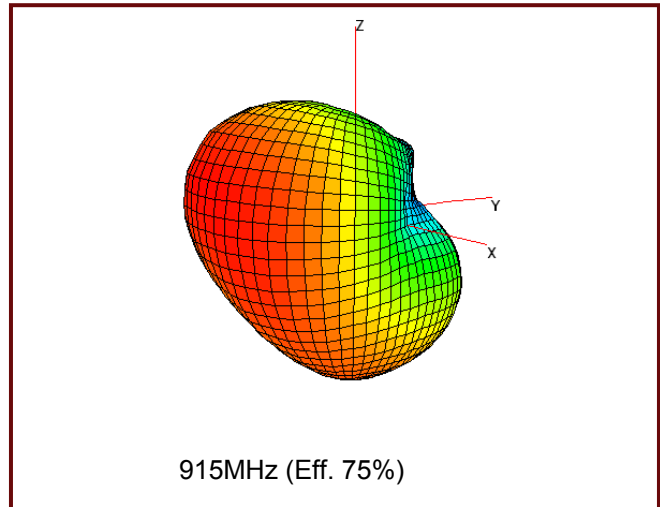


Typical 3D Gain Patterns/Efficiency (Mounted on meter)



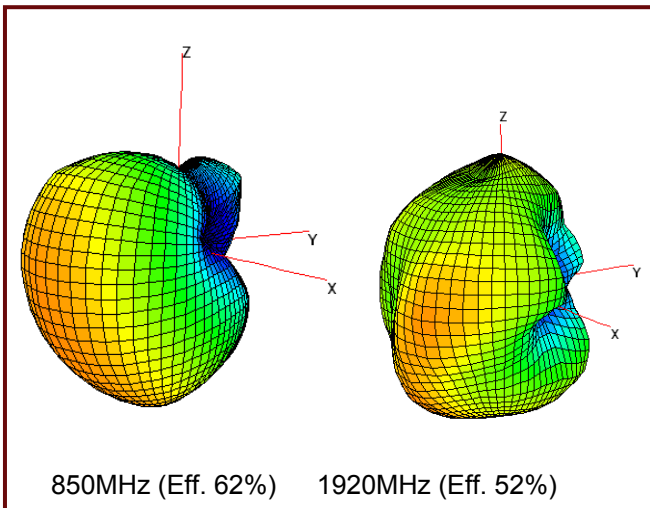
2.44GHz (Eff. 62%)

WPIANTUGMB (2.4GHz) Series



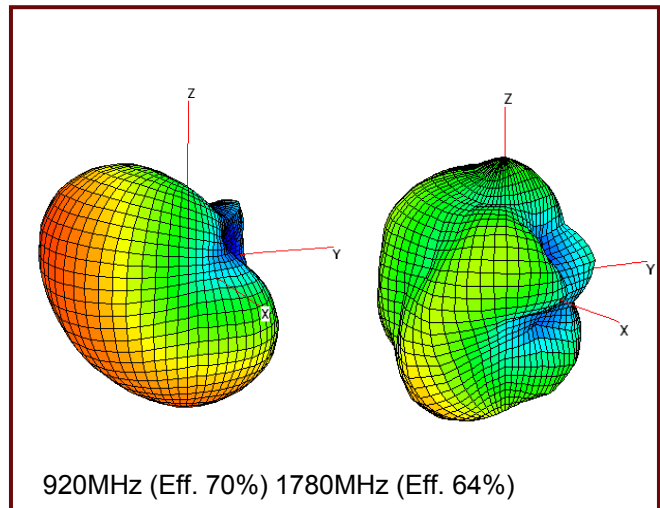
915MHz (Eff. 75%)

WPIANTUGMA (900MHz) Series



850MHz (Eff. 62%) 1920MHz (Eff. 52%)

WPIANTUGMF (850/1900MHz) Series

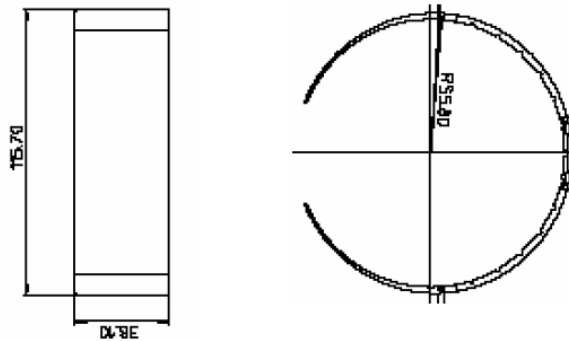


920MHz (Eff. 70%) 1780MHz (Eff. 64%)

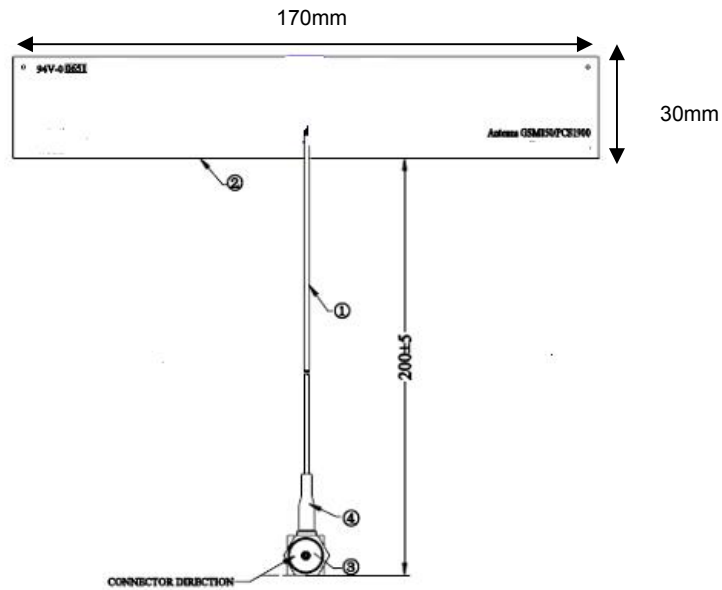
WPIANTUGME (900/1800MHz) Series



UGM Radome Drawing



PCB Assembly/Dimensions





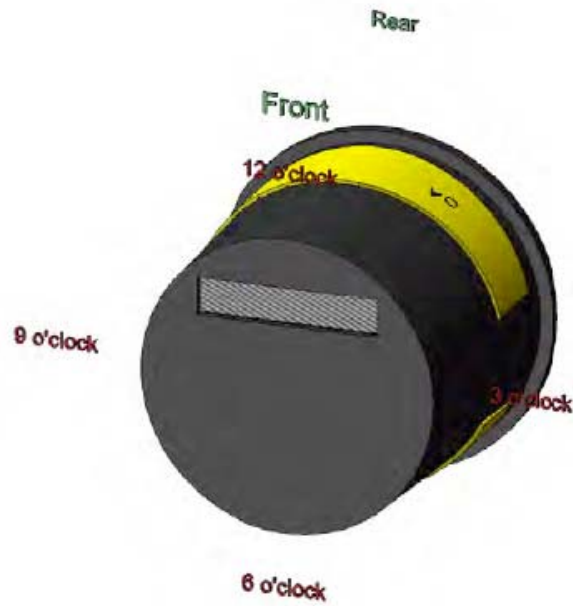
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PIONEERING TECHNOLOGY
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WPIANTUGM/FR4 Series

AMR Under Glass Mount Antenna

Typical Mounting Location On Meter





Part Number Configuration Guide

WPIANT UGM F R1 200 06 A X
 (1) (2) (3) (4) (5) (6) (7) (8)

Above example= **UGM**; Under Glass Mount (with radome/housing), **F**;GSM 850/1900, **R1**; RG178 cable, **200**; 200mm long, **06**; RA MMCX connector, **A**; revision A

(1) Product Type

WPIANT: Antenna

(2) Product Series

UGM: Under Glass Mount Antenna

FR4: No radome housing (bare PCB assembly)

(3) Frequency Code

A: 900MHz ISM band (902~928MHz)

B: 2.45GHz ISM band (2.40~2.50GHz)

E: GSM900/DCS1800 dual band (880~960MHz + 1710~1880MHz)

F: GSM850/PCS1900 dual band (824~894MHz + 1850~1990MHz)

G: GSM850/900/1800/1900 quad band (E+F frequency codes combined)*

(4) Cable type

R1: RG178

R2: 1.13mm OD micro-coaxial

R3: 1.30mm OD micro-coaxial

(5) Cable Length

XXX: 3 digits in mm (eg: 200= 200mm long)

(6) Connector Style

00: No connector (pig tail)

08: IPEX MHF (version 1)

01: TNC

09: BNC

02: R TNC

10: Hirose U.FL

03: RA SMA (male)

11: MMCX (male)

04: SMA (male)

12: MCX

05: RA MCX

13: SMA (female)

06: RA MMCX (male)

14: RA SMA (female)

07: RA SMA (female)

(7) Revision

A – 1st release

(8) Customer special requirements

* planned item - available on request