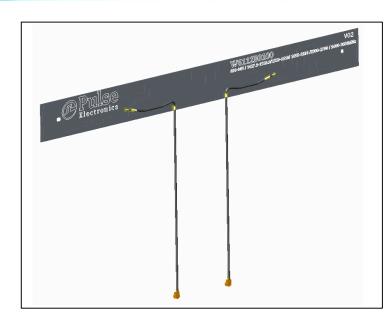
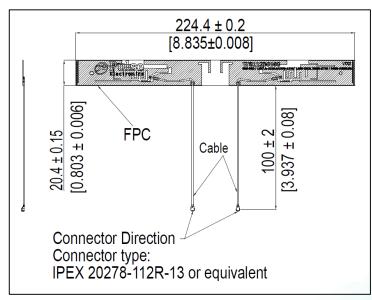


**Description: 2x2 MIMO LTE FPC ANTENNA** 

**PART NUMBER: W6112B0100** 







All dimensions are in mm / inches

# Features:

- 2G / 3G / 4G
- Global LTE Bands:
  - B1-B23, B25-B29, B33-B42
  - N.A.; Europe, Asia (incl. Jap.)
- · Single device
  - Guaranteed Port-to-Port Isolation
- Foldable for tight spaces

# **Applications:**

- Challenging RF Environments Demanding:
  - · Highest Peak Gain
  - Lowest ECC (Envelope Correlation Coeff.).
- Matched to Radio Modules from:
  - Sierra Wireless, Telit, Huawei, Gemalto, uBlox, ZTE, and others.
- · Security, Video, Graphics
- IoT, SmartGrid, Meters, Remote Monitoring, Sensor Networks
- Transportation, Tracking

Issue: 1616

In the effort to improve our products, we reserve the right to make changes judged to be necessary. CONFIDENTIAL AND PROPRIETARY INFORMATION

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**Description: 2x2 MIMO LTE FPC ANTENNA** 

**Series: Gemini** 

**PART NUMBER: W6112B0100** 

## **ELECTRICAL SPECIFICATIONS**

Frequency	698-960/1427.9-1510.9/15	59-1610/
	1695-2200/2300-2700/3400	-3600 MHz
Nominal Impedance		$50\Omega$
Return loss(698-960MHz)		-6dB
Return loss(1427.9-1510.9/1559-1610/		
1695-2200/2300-2700/3400-3600MHz)		-7.5dB
Isolation(698-960MHz)		-10dB
Isolation(1427.9-1510.9/1559-1610/		
1695-2200/2300-2700/3400-3600MHz)		-13dB
Average Total Efficiency (698-960MHz)		55%
Average Total Efficiency (1427.9-1510.9MHz)		60%
Average Total Efficiency (1559-1610MHz)		60%
Average Total Efficiency (1695-2200MHz)		65%
Average Total Efficiency (2300-2700MHz)		70%
Average Total Efficiency (3400-3600MHz)		65%



**Description: 2x2 MIMO LTE FPC ANTENNA** 

**Series: Gemini** 

**PART NUMBER: W6112B0100** 

ELECTRICAL SPECIFICATIONS		
Peak Gain (698-960MHz)	4.3dBi	
Peak Gain (1427.9-1510.9MHz)	3.4dBi	
Peak Gain (1559-1610MHz)	2.4dBi	
Peak Gain (1695-2200MHz)	4.1dBi	
Peak Gain (2300-2700MHz)	4.6dBi	
Peak Gain (3400-3600MHz)	4.0dBi	
Radiation Pattern	Omni	
Polarization	Linear	
Power withstanding	3W	
Connector type	IPEX 20278-112R-13	
Cable type	Low loss Φ1.13mm Coaxial Cable	
Cable length	100mm	

(\*) All RF parameters measured on 2mm thick PC plate



**Description: 2x2 MIMO LTE FPC ANTENNA** 

**Series: Gemini** 

**PART NUMBER: W6112B0100** 

# MECHANICAL SPECIFICATIONS

Color Black

Weight 2.9 g

Overall Length 8.835 INCHES

Fixing system Adhesive Tape, 3M6677 PC

## **ENVIRONMENTAL SPECIFICATIONS**

Operating temperature

-40~85° C

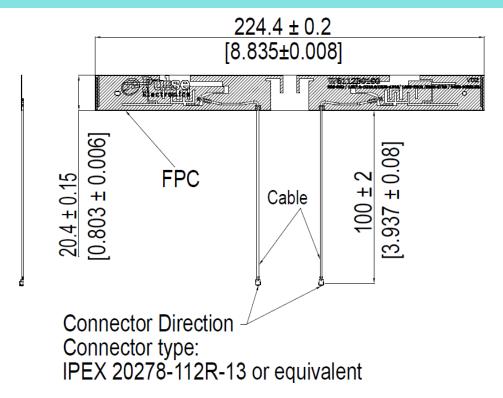


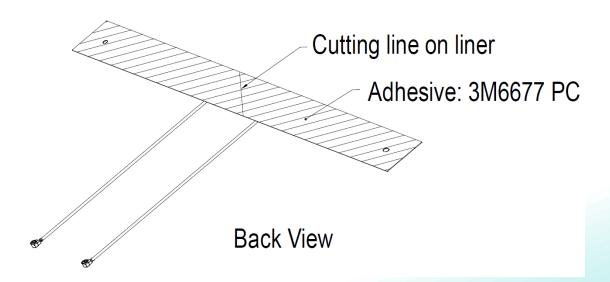


**Description: 2x2 MIMO LTE FPC ANTENNA** 

Series: Gemini
PART NUMBER: W6112B0100

## **MECHANICAL DRAWING**







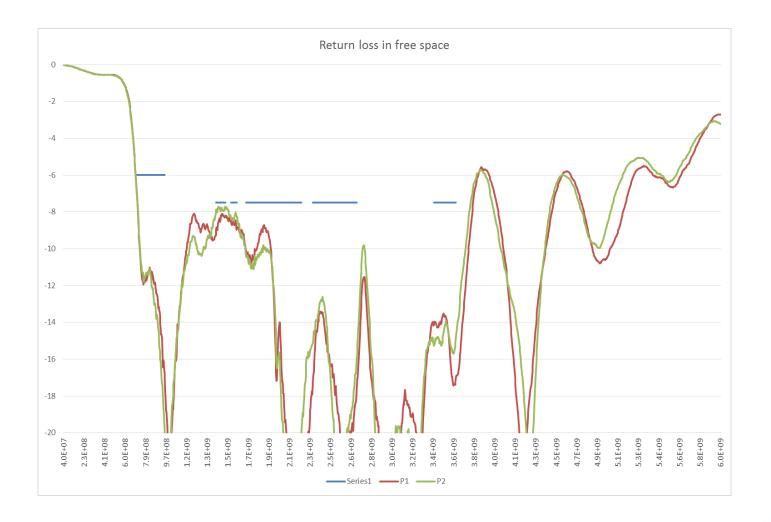
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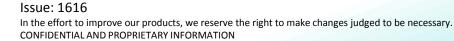
**PART NUMBER: W6112B0100** 

# Series: Gemini

## **CHARTS**

## Return Loss









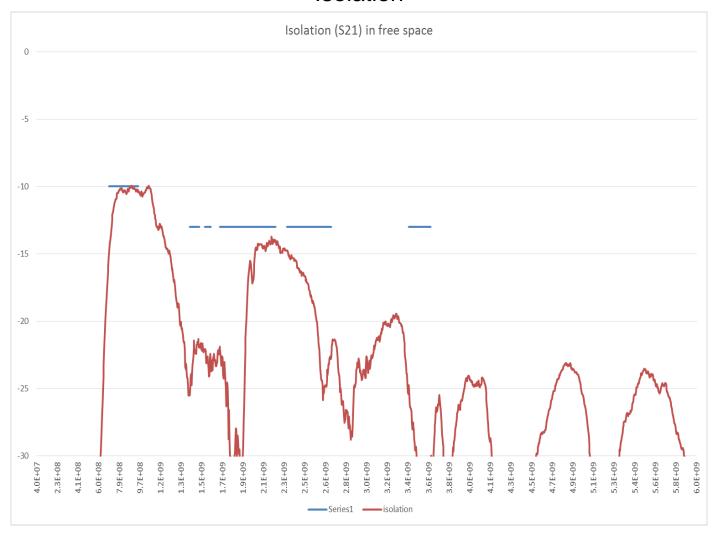
**Description: 2x2 MIMO LTE FPC ANTENNA** 

**PART NUMBER: W6112B0100** 

# Series: Gemini

## **CHARTS**

# Isolation









**Description: 2x2 MIMO LTE FPC ANTENNA** 

**PART NUMBER: W6112B0100** 

Series: Gemini

## **CHARTS**

# Efficiency(%)

Total Efficiency in free space, %



—P1 ——P2





**Description: 2x2 MIMO LTE FPC ANTENNA** 

**PART NUMBER: W6112B0100** 

Series: Gemini

## **CHARTS**

# Peak Gain(dBi)

Peak gain in free space, dBi



— P1 —— P2





Series: Gemini

## **TECHNICAL DATA SHEET**

**Description: 2x2 MIMO LTE FPC ANTENNA** 

**PART NUMBER: W6112B0100** 

# CHARTS

# Average Gain(dBi)

Average gain in free space, dBi



Issue: 1616





**Description: 2x2 MIMO LTE FPC ANTENNA** 

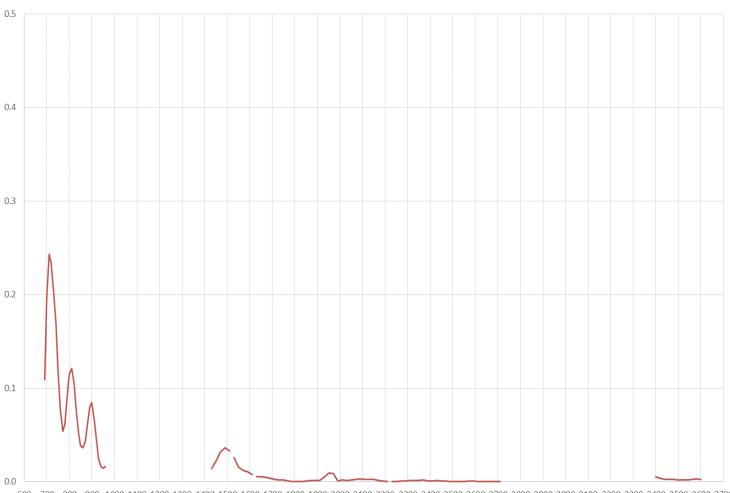
**PART NUMBER: W6112B0100** 

# Series: Gemini

## **CHARTS**

# **ECC**

ECC in free space, uniform pdf, XPR=0dB



 $600 \quad 700 \quad 800 \quad 900 \quad 1000 \quad 1100 \quad 1200 \quad 1300 \quad 1400 \quad 1500 \quad 1600 \quad 1700 \quad 1800 \quad 1900 \quad 2000 \quad 2100 \quad 2200 \quad 2300 \quad 2400 \quad 2500 \quad 2600 \quad 2700 \quad 2800 \quad 2900 \quad 3000 \quad 3100 \quad 3200 \quad 3300 \quad 3400 \quad 3500 \quad 3600 \quad 3700 \quad 3000 \quad 3000$ 



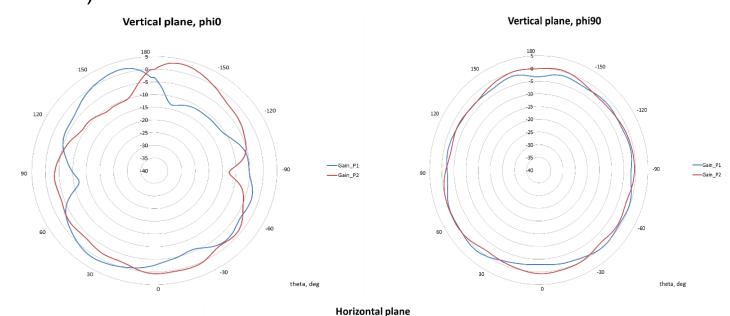


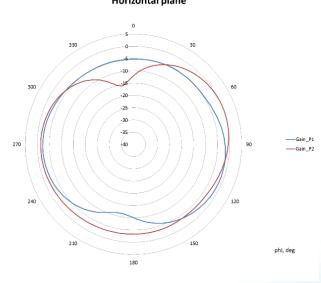
# **Description: 2x2 MIMO LTE FPC ANTENNA**

Series: Gemini
PART NUMBER: W6112B0100

## **CHARTS**

# Typical free space radiation pattern 698-960MHz (800MHz)







Series: Gemini

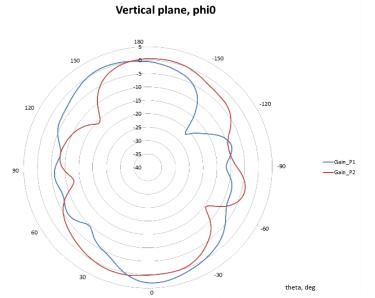
## **TECHNICAL DATA SHEET**

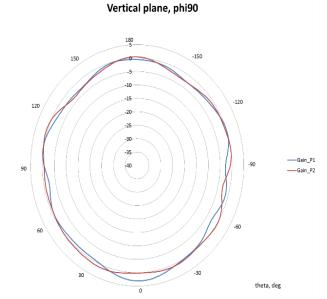
**Description: 2x2 MIMO LTE FPC ANTENNA** 

PART NUMBER: W6112B0100

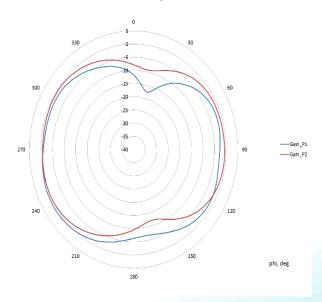
## **CHARTS**

# Typical free space radiation pattern 1427.9-1510.9MHz (1450MHz)





#### Horizontal plane





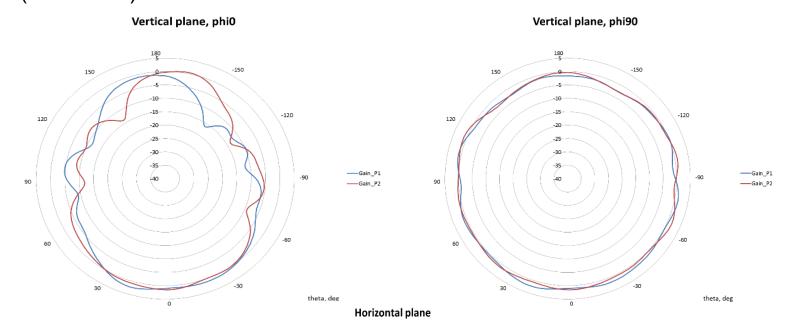
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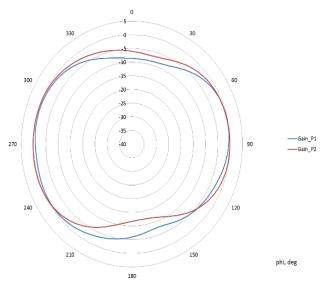
Series: Gemini

**PART NUMBER: W6112B0100** 

## **CHARTS**

Typical free space radiation pattern 1559-1610MHz (1570MHz)





Issue: 1616



**Description: 2x2 MIMO LTE FPC ANTENNA** 

Series: Gemini **PART NUMBER: W6112B0100** 

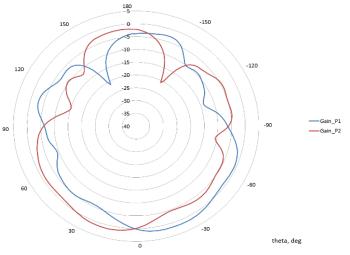
## **CHARTS**

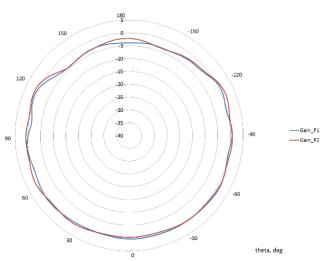
# Typical free space radiation pattern 1695-2200MHz (1930MHz)

Vertical plane, phi0

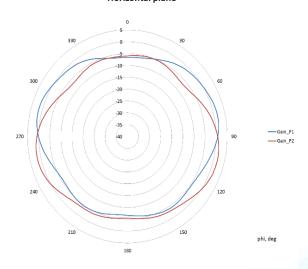


Vertical plane, phi90





## Horizontal plane





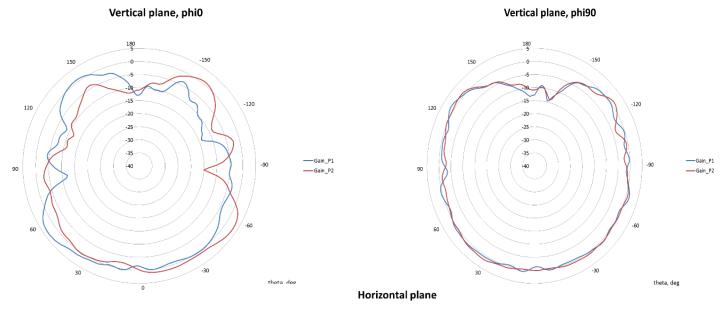
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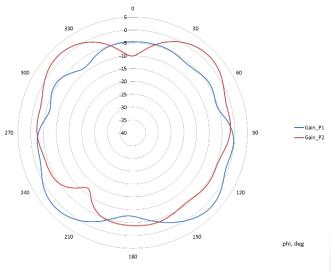
PART NUMBER: W6112B0100

# Series: Gemini

## **CHARTS**

# Typical free space radiation pattern 2300-2700MHz (2390MHz)







Series: Gemini

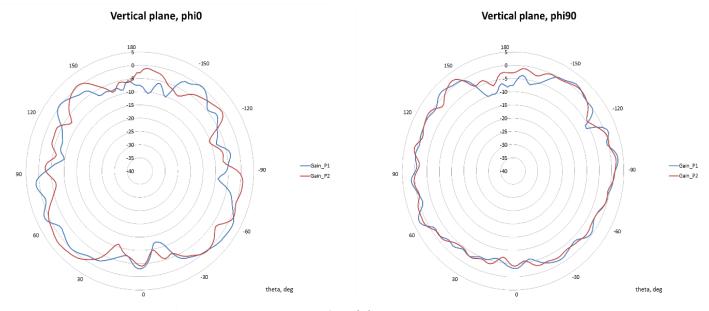
## **TECHNICAL DATA SHEET**

**Description: 2x2 MIMO LTE FPC ANTENNA** 

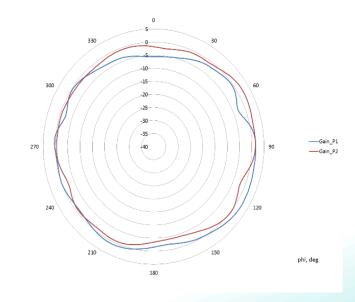
PART NUMBER: W6112B0100

# **CHARTS**

Typical free space radiation pattern 3400-3600MHz (3400MHz)



## Horizontal plane



Issue: 1616