

Embedded Active GPS + GSM/3G PCB Antenna, 824-960/1710-1990 + 1575-1602, 3 dBi/5 dBic, 1.13mm coax, U.FL Compatible Connector



HG821-03PU-GPS

Features

- Highly efficient printed circuit board (PCB) design
- Designed for omni-directional applications
- Low profile, compact size
- IPEX, U.FL, UMCX compatible connector
- Integrated active GPS/GNSS Antenna

Applications

- Integrate into self-contained wireless equipment
- Embedded applications requiring integration flexibility
- Multiband cellular frequencies
- GPS/GNSS

Description

The HG821-03PU-GPS is a combination cellular and active GPS omnidirectional antenna designed to integrate into devices requiring wireless capability. It includes an integrated GPS/GNSS Antenna. By embedding these antennas directly into a device, the need for external antennas is eliminated. The omni-directional radiation pattern makes it ideal for multipoint and mobile wireless systems.

Configuration

Application Band	Cellular/GPS
Band Type	Multi
Radiation Pattern	Omni Directional
Cable Type	1.13mm
Cable Length	3.9 in [99.06 mm]
Connector Type	U.FL/IPX
Number of Ports	2

Electrical Specifications

		Port 1	Port 2	
Antenna	Frequencies (MHz)	1575.42-1602	824-960	1710-2200
	Polarization	RHCP	Vertical	Vertical
	Gain	5 dBic	2 dBi	3 dBi
	VSWR	<2.0:1	<2.5:1	<2.5:1
	Impedance	50 Ω		
	Axial Ratio	N/A		
LNA	Gain	28±2 dB	N/A	
	Noise Figure	<1.5		
	Filter Insertion Loss	<3 dB		
	Ex-band Attenuation	12dB@CF+50MHz/16dB@CF-50MHz		
	Supply Voltage	2.2~5 VDC		
	Current Consumption	5~15 mA		

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Embedded Active GPS + GSM/3G PCB Antenna, 824-960/1710-1990 + 1575-1602, 3 dBi/5 dBic, 1.13mm coax, U.FL Compatible Connector](#)

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Mechanical Specifications

Size

Length	1.65354 in [42 mm]
Width	1.65354 in [42 mm]
Height	0.0393701 in [1 mm]

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Humidity	<75%
Vibration	10 to 55Hz with 1.5mm amplitude 2hours

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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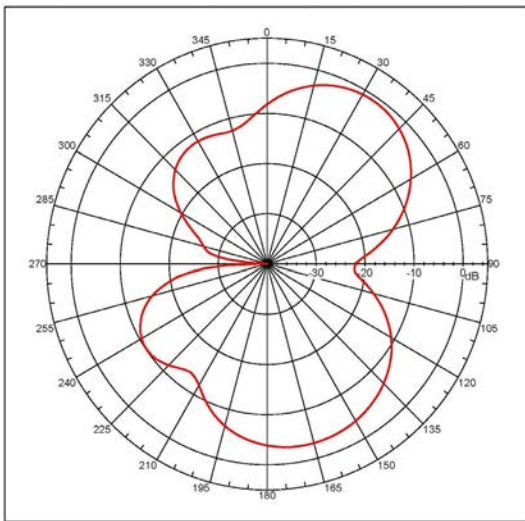


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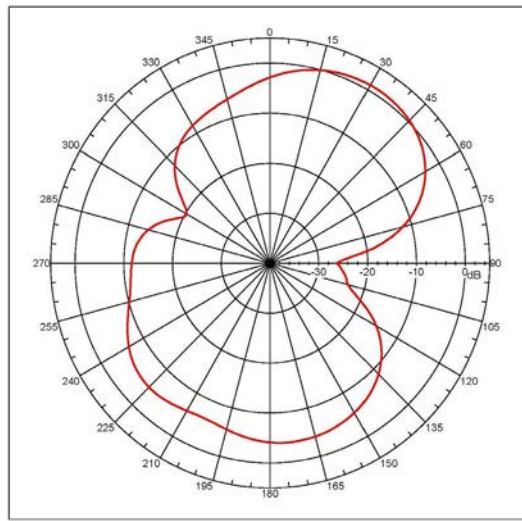
Typical Radiation Pattern

GSM Test - Pattern

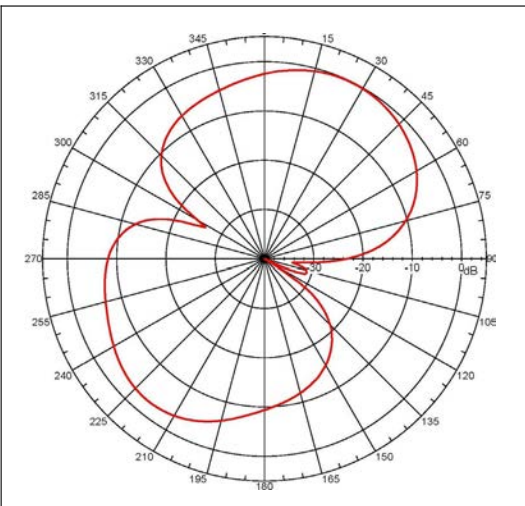
880 MHz



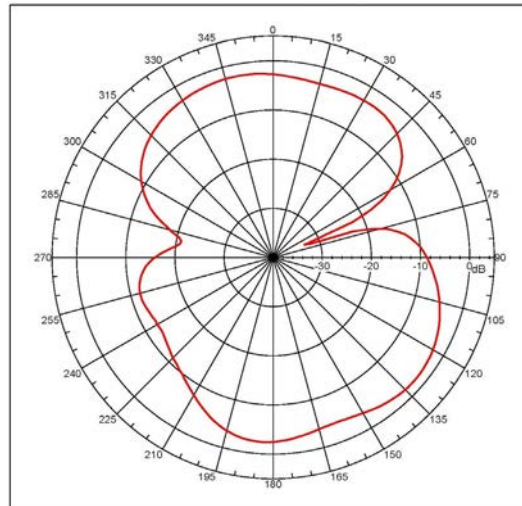
920 MHz



960 MHz



1710 MHz

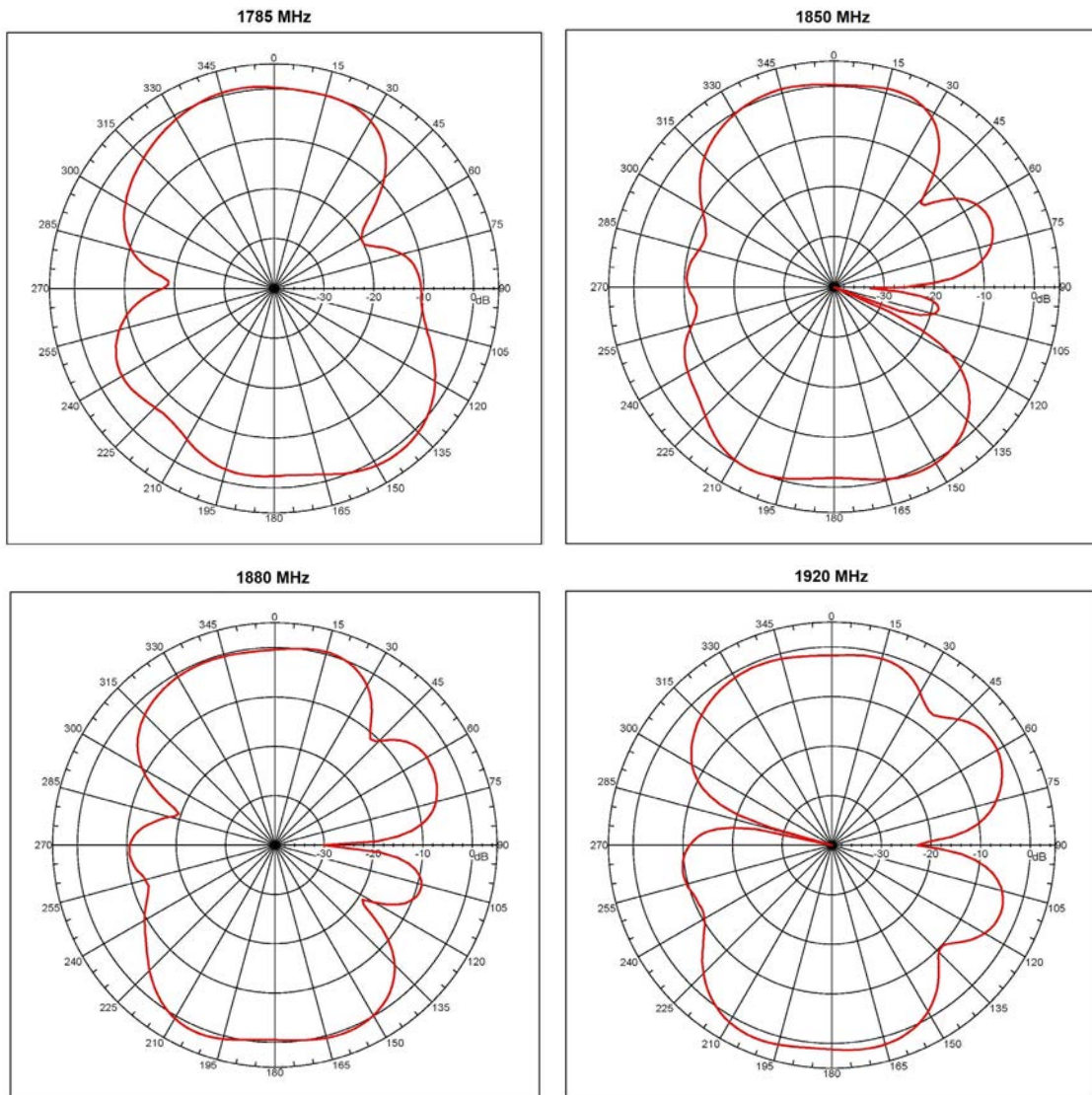


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GSM Test - Pattern

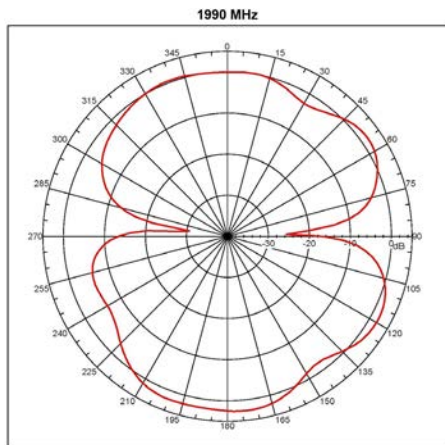


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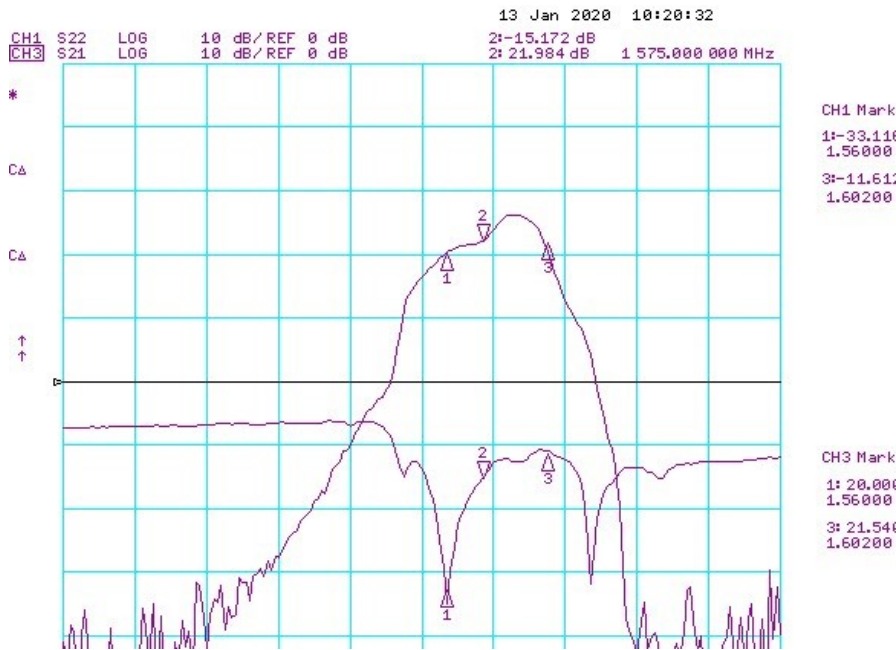


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GSM Test - Pattern



GPS and GLONASSS



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Connector from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

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L-com CAD Drawing

