

## 5-in1 Cellular, Wi-Fi, GPS Combination IoT Antenna FAKRA Jack ABS Radome White IP69K

### KPANOM1091



#### Features

- 2 x Cellular 4G/5G
- 2 x Wi-Fi 2.4 GHz / 5 GHz
- 1 x GPS L1 / G1
- MIMO Capable
- Color coded FAKRA Jack
- 17 ft Cable Leads
- Indoor/Outdoor IP69K Rated
- UV Stabilized White ABS

#### Applications

- Public Safety
- Emergency Services
- Mobile Base Stations
- Autonomous Vehicles
- Fleet Management
- Smart Cities
- Smart Utilities
- Industrial IoT

#### Description

The KP Performance KPANOM1091 is a 5-in-1 combination antenna designed for public safety, emergency services, mobile base stations, autonomous vehicles, fleet management, smart cities, smart utilities, or industrial IoT applications. This vertically polarized omnidirectional antenna has color-coded FAKRA female connectors with 17 feet cable leads. Our high-quality mobile antenna with 5 ports has a typical input VSWR of 2:1.

The IoT combination antenna from KP Performance has an overall length of 7 inches, width of 7 inches, and weight of 4 lbs. This KPANOM1091 mobile antenna is IP69K-rated and has a white-colored radome made of UV-stabilized ABS. The 2 cellular, 2 Wi-Fi, 1 GPS combination antenna has an impedance of 50 Ohms and a maximum input power of 10 Watts.

Our vertically polarized mobile antenna can operate at temperatures ranging from -40 to 70 degrees C. This MIMO-capable IoT antenna features two 4G/5G, two 2.4/5 GHz, and one L1/G1 GPS band elements in one radome. Emergency services, first responders, and fleets can rely on our 5-in-1 combination antenna to maintain a secure link between vehicles and dispatch centers.

#### Configuration

Design	Mobile
Radiation Pattern	Omni Directional
Polarization	Vertical
Connector Type	FAKRA Female
Number of Ports	5

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Input VSWR		2:1		
Impedance		50		Ohms
Input Power			10	Watts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:  
[5-in1 Cellular, Wi-Fi, GPS Combination IoT Antenna FAKRA Jack ABS Radome White IP69K KPANOM1091](#)

5-in1 Cellular, Wi-Fi, GPS Combination IoT Antenna  
FAKRA Jack ABS Radome White IP69K

**KPANOM1091**



<b>Cellular Specifications</b>					
Frequency Range	617 - 960	1690 - 2700	3300 - 4200	4900 - 6000	MHz
Peak Gain	4	6	7	8	dBi
Port Count	2				
Cable Type	RG58				
Cable Length	17 [5]				
Connector Type	FAKRA Jack				
Connector Color	Bordeaux				
Connector Code	D				
<b>Wi-Fi Specifications</b>					
Frequency Range	2400 - 2500	4900 - 6000			MHz
Peak Gain	5	6			dBi
Port Count	2				
Cable Type	RG58				
Cable Length	17 [5]				
Connector Type	FAKRA Jack				
Connector Color	Beige				
Connector Code	I				
<b>GPS Specifications</b>					
Frequency Range	1562 - 1612				MHz
VSWR	<2.0:1 ± 4 MHz				
LNA Gain	26				dB
Out of band rejection	>40 dB (@ > +/- 100 MHz)				
Typical Noise Figure	≤ 2.7				dB
Notch Filter rejection @787MHz	24				dB
Operating Voltage	3 - 5				VDC
Typical Current	15				mA
Cable Type / Length	RG174 / 17 ft [5 m]				
Connector Type	FAKRA Jack				
Connector Color / Code	Blue / C				

**Mechanical Specifications**

Radome Material

UV Stabilized ABS

Size

Length

7 in [177.8 mm]

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**KPANOM1091**



Width	7 in [177.8 mm]
Height	3.15 in [80.01 mm]
Weight	4 lbs [1.81 kg]

**Environmental Specifications**

<b>Temperature</b>	
Operating Range	-40 to +70 deg C

**Plotted and Other Data**

Notes:

**Appendix**

**Electrical Downtilt:** Angle in the antenna's elevation pattern in which the maximum gain occurs.

**Gain:** Antenna's average gain.

**Front to Back Ratio @ 180°±30°:** Average difference between the antenna's maximum gain and the maximum gain in the antenna's back lobe over ±30° angles.

**Cross-polarization Ratio (dB):** Typical difference between the co-polarization and cross-polarization gain across the sector's 3 dB Beam Width.

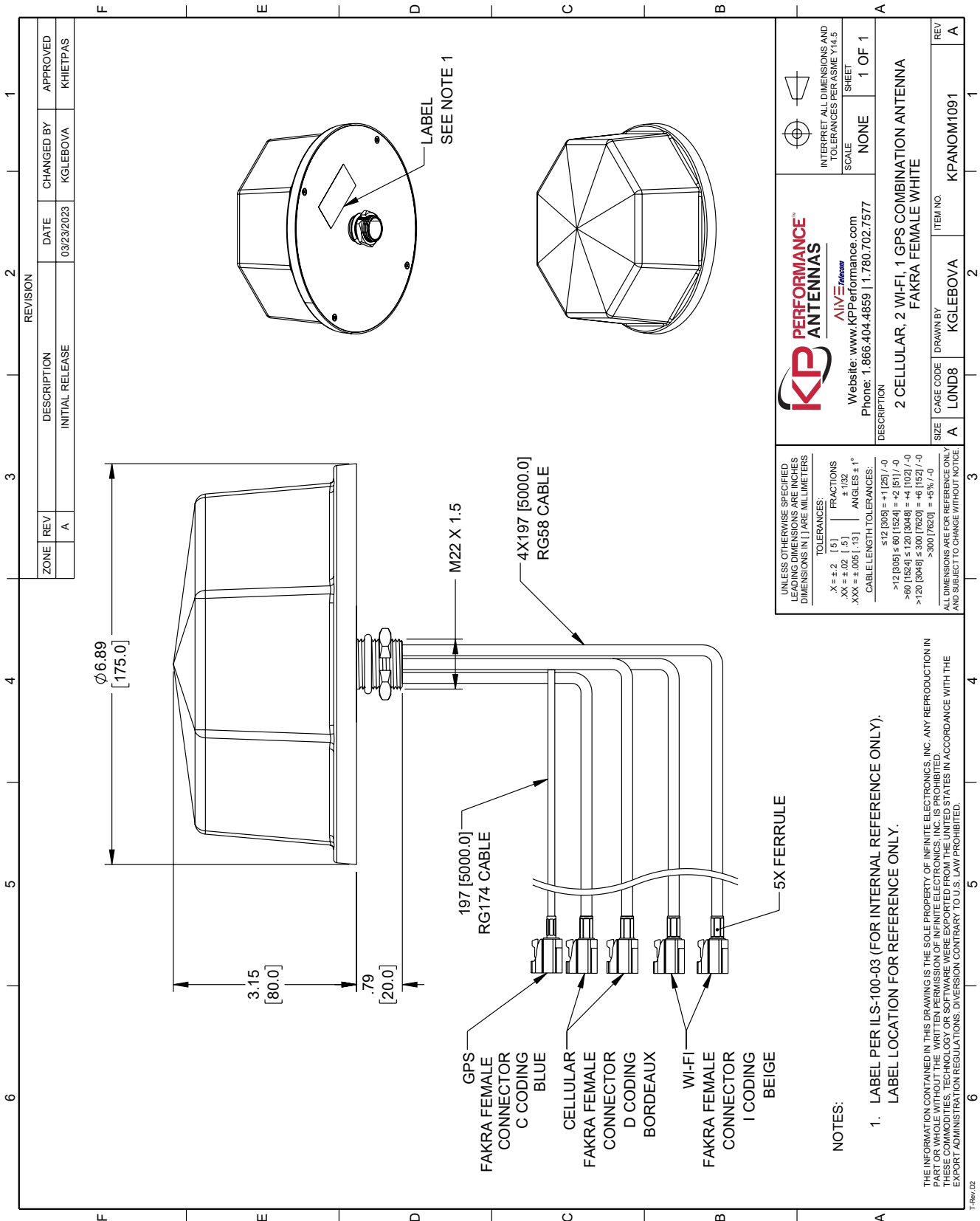
Dedicated to serving the needs of the Wireless Internet Service Provider (WISP) market, KP Performance Antennas offers purpose built products that reliably perform in the field. KP Performance Antennas product line consists of Yagi, Grid, Omni, Dish and other style antennas that operate in the 900 MHz, 2.4 GHz, 3 GHz, and 5 GHz frequencies.

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URL:

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. KP Performance reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. KP Performance does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and KP Performance does not assume liability arising out of the use of any part or document.

KPANOM1091 CAD Drawing



ZONE		REV		DESCRIPTION		DATE		CHANGED BY		APPROVED	
A		A		INITIAL RELEASE		03/23/2023		KGLEBOVA		KHIETPAS	

REVISION		DATE		CHANGED BY		APPROVED	
INITIAL RELEASE		03/23/2023		KGLEBOVA		KHIETPAS	

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLERANCES:

X = ±.2 [5] FRACTIONS  
 XX = ±.02 [5] ANGLES ± 1°  
 XXX = ±.005 [13] ANGLES ± 1°

CABLE LENGTH TOLERANCES:

< 12 [305] ± .60 [1524] = ±.125 / -0  
 > 12 [305] ± .60 [1524] = ±.151 / -0  
 > 60 [1524] ± 1.20 [3048] = ±.102 / -0  
 > 120 [3048] ± 3.00 [7620] = ±.152 / -0  
 > 300 [7620] ± .5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE NONE

SHEET 1 OF 1

**KP PERFORMANCE ANTENNAS**  
 AIVE Telecom  
 Website: www.kpperformance.com  
 Phone: 1.866.404.4859 | 1.780.702.7577

DESCRIPTION: 2 CELLULAR, 2 WI-FI, 1 GPS COMBINATION ANTENNA FAKRA FEMALE WHITE

SIZE: A LOND8  
 CAGE CODE: LOND8  
 DRAWN BY: KGLEBOVA  
 ITEM NO.: KPANOM1091

REV: A

NOTES:

1. LABEL PER ILS-100-03 (FOR INTERNAL REFERENCE ONLY). LABEL LOCATION FOR REFERENCE ONLY.

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