

## 31.5 dBi Active GPS Magnet Mount Antenna RHCP 1575 MHz, RG174 SMA Male IPX6

### KPANGPS1012



#### Features

- SMA Male
- Right Hand Circular Polarized
- 28 dB LNA w/ low 1.5 dB Noise Figure
- Neodymium Rare-Earth Magnet
- IPX6 Rated

#### Applications

- GPS L1
- High Accuracy Global Positioning
- Precision Agriculture, Mining and Construction
- Law Enforcement and Public Safety
- Vehicle Fleet Management

#### Description

KP Performance's Active GNSS Antenna KPANGPS1012 is Right Hand Circular Polarized with an integrated Neodymium Rare Earth Magnet for a secure mount. The KPANGPS1012 is an active GPS L1 band antenna with 31.5 dBi Gain. These Magnet Mount active GNSS antenna units are ideally suited for use on vehicles where low profile, low drag, non-penetrating style antennas are needed.

Our GNSS antenna specialists are ready and available to answer any questions you may have on the KPANGPS1012. This high quality SMA male antenna meets GPS L1 requirements by operating in the 1574 MHz to 1577 MHz frequency range.

The KPANGPS1012 GNSS antenna series from KP are designed for mobile, vehicle, or fleet services to receive GNSS signals from satellite constellations to triangulate geolocations for navigation, tracking, and surveying.

#### Configuration

Design	GPS Active
Band Type	Single
Polarization	RHCP
Cable Type	RG174
Connector Type	SMA Male
Number of Ports	1

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	1,574		1,577	MHz
Input VSWR			1.5:1	
Output VSWR			2:1	
Impedance		50		Ohms
Gain		31.5		dBi
Gain Variation		±5		dBi
Operating DC Voltage	3		5	Volts
Current	5.5	8.5	11.5	mA

#### Specifications by Band

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:  
[31.5 dBi Active GPS Magnet Mount Antenna RHCP 1575 MHz, RG174 SMA Male IPX6 KPANGPS1012](#)

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**KPANGPS1012**



Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	1.574 to 1.577					GHz
Center Frequency	1.575					GHz

**Mechanical Specifications**

**Size**

Length	1.5 in [38.1 mm]
Width	1.3 in [33.02 mm]
Height	0.5 in [12.7 mm]
Weight	0.14 lbs [63.5 g]

**Environmental Specifications**

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

IP Rating	IPX6
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**Plotted and Other Data**

Notes:

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**KPANGPS1012**



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## 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.

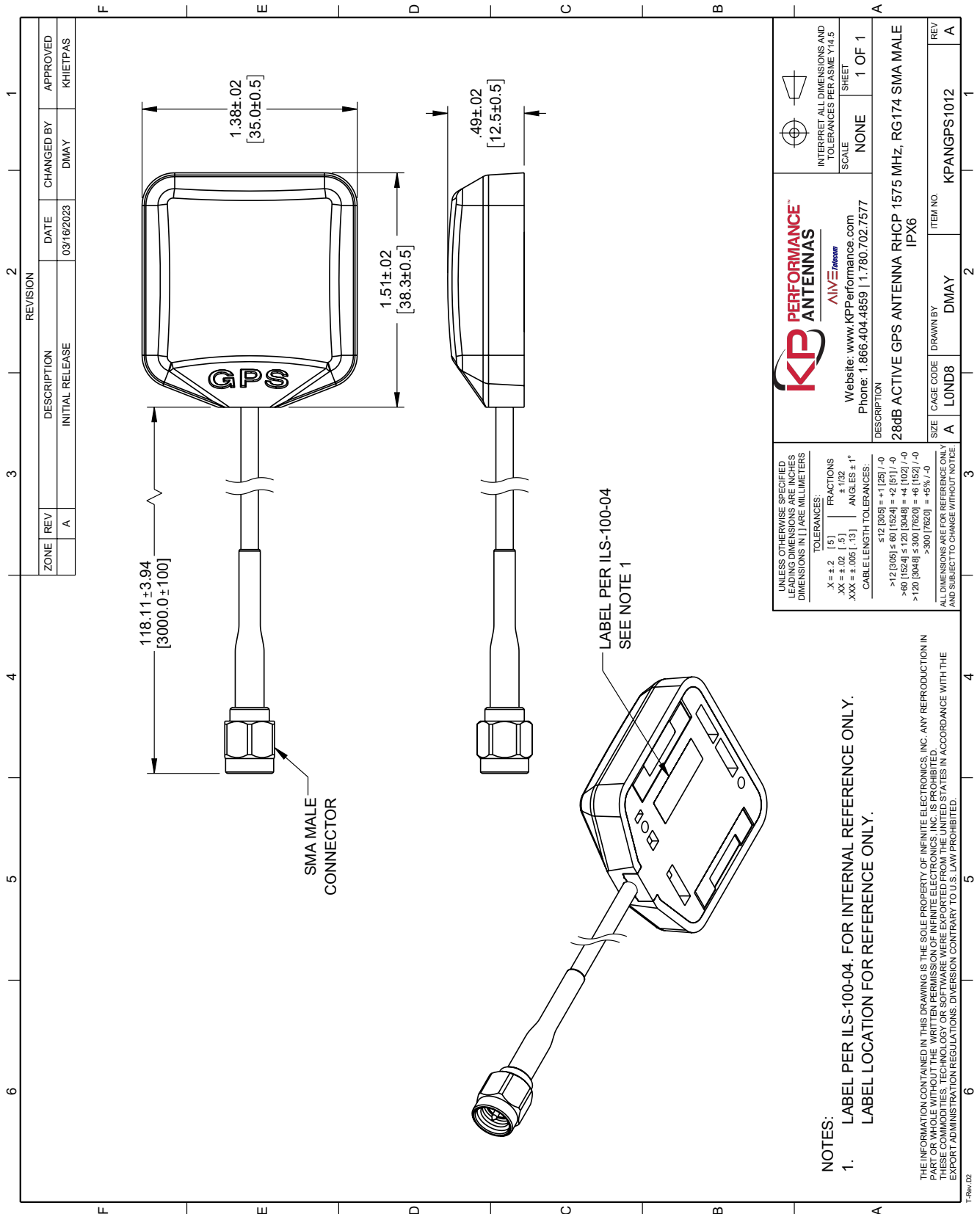
Dedicated to serving the needs of the Wireless Internet Service Provider (WISP) market, KP Performance Antennas offers purpose built products that reliably perform in the field. KP Performance Antennas product line consists of Yagi, Grid, Omni, Dish and other style antennas that operate in the 900 MHz,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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [31.5 dBi Active GPS Magnet Mount Antenna RHCP 1575 MHz, RG174 SMA Male IPX6 KPANGPS1012](#)

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.

KPANGPS1012 CAD Drawing



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

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5  
 SCALE NONE  
 SHEET 1 OF 1

DESCRIPTION  
 28dB ACTIVE GPS ANTENNA RHCP 1575 MHz, RG174 SMA MALE IPX6

SIZE A LONDB  
 CAGE CODE LONDB  
 DRAWN BY DMAY  
 ITEM NO. KPANGPS1012

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE 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] = ±1 [25] / -0  
 >12 [305] ≤ 60 [1524] = ±2 [51] / -0  
 >60 [1524] ≤ 120 [3048] = ±4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = ±6 [152] / -0  
 >300 [7620] = ±5% / -0  
 ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE

NOTES:  
 1. LABEL PER ILS-100-04. FOR INTERNAL REFERENCE ONLY.  
 LABEL LOCATION FOR REFERENCE ONLY.

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