

## 31 dBi Active GPS/GLONASS Magnet Mount Antenna RHCP 1575/1602 MHz, RG174 SMA Male IPX6

### KPANGPS1010



#### 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/GLONASS G1
- High Accuracy Global Positioning
- Precision Agriculture, Mining and Construction
- Law Enforcement and Public Safety
- Vehicle Fleet Management

#### Description

KP Performance's Active GNSS Antenna KPANGPS1010 is Right Hand Circular Polarized with an integrated Neodymium Rare Earth Magnet for a secure mount. The KPANGPS1010 is an active GPS L1 and GLONASS G1 band antenna with 31 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 KPANGPS1010. This high quality SMA male antenna meets GPS L1 and GLONASS G1 requirements by operating in the 1574 MHz to 1607 MHz frequency range.

The KPANGPS1010 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   |         | 1,607   | MHz   |
| Input VSWR            |         |         | 1.5:1   |       |
| Output VSWR           |         |         | 2:1     |       |
| Impedance             |         | 50      |         | Ohms  |
| Gain                  |         | 31      |         | dBi   |
| Gain Variation        |         | ±5      |         | dBi   |
| Out Of Band Rejection | 30      |         |         | dB    |
| Operating DC Voltage  | 3       |         | 5       | Volts |
| Current               | 5.5     | 8.5     | 11.5    | mA    |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:  
[31 dBi Active GPS/GLONASS Magnet Mount Antenna RHCP 1575/1602 MHz, RG174 SMA Male IPX6 KPANGPS1010](#)

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**KPANGPS1010**



**Specifications by Band**

| Description      | Band 1         | Band 2         | Band 3 | Band 4 | Band 5 | Units |
|------------------|----------------|----------------|--------|--------|--------|-------|
| Range            | 1.574 to 1.577 | 1.597 to 1.607 |        |        |        | GHz   |
| Center Frequency | 1.575          | 1.602          |        |        |        | 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 | 0.2 lbs [90.72 g] |

**Environmental Specifications**

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

|           |      |
|-----------|------|
| IP Rating | IPX6 |
|-----------|------|

**Plotted and Other Data**

Notes:

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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.

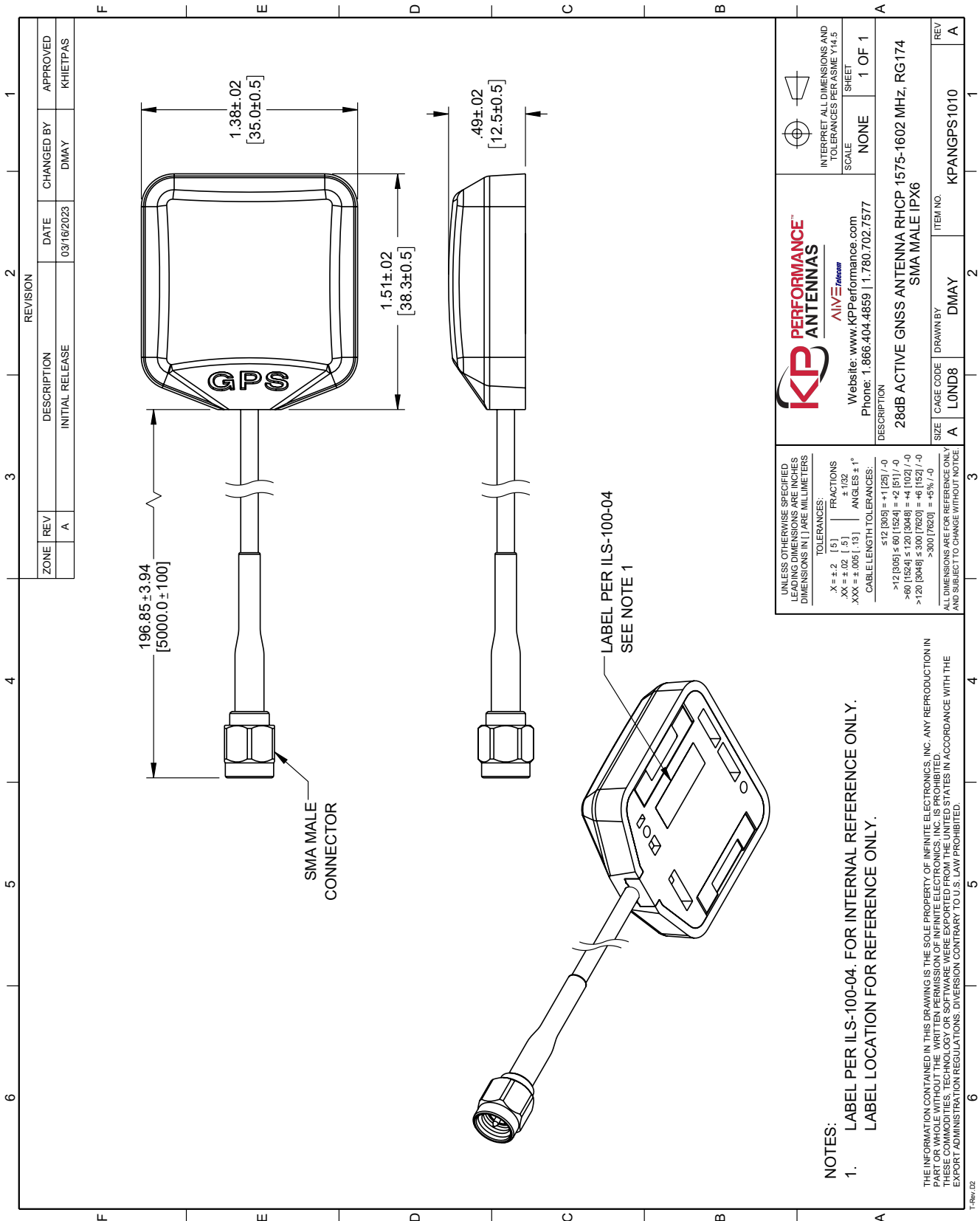
Dedicated to serving the needs of the Wireless Internet Service Provider (WISP) market, KP Performance Antennas offers purpose built products that reliably perform in the field. KP Performance Antennas product line consists of Yagi, Grid, Omni, Dish and other style antennas that operate in the 900 MHz,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

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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.

KPANGPS1010 CAD Drawing



| ZONE |     | REVISION    |      | CHANGED BY |          | APPROVED        |            |
|------|-----|-------------|------|------------|----------|-----------------|------------|
| A    | REV | DESCRIPTION | DATE | DMAY       | KHIETPAS | INITIAL RELEASE | 03/16/2023 |
|      | A   |             |      |            |          |                 |            |

|  |                  |   |
|--|------------------|---|
| <p><b>PERFORMANCE ANTENNAS</b><br/>AIVE Telecom</p> <p>Website: www.kpperformance.com<br/>Phone: 1.866.404.4859   1.780.702.7577</p> |                  | <p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p> |
| <p>DESCRIPTION: 28dB ACTIVE GNSS ANTENNA RHCP 1575-1602 MHz, RG174 SMA MALE IPX6</p>   |                  |   |
| SIZE: A  | CAGE CODE: LOND8 | ITEM NO: KPANGPS1010  |
| DRAWN BY: DMAY   | REV: A           |   |

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] = ±1 [25] / -0  
 > 12 [305] = ±6 [152] / -0  
 > 60 [1524] = ±2 [51] / -0  
 > 120 [3048] = ±4 [102] / -0  
 > 300 [7620] = ±6 [152] / -0  
 > 900 [22800] = ±6 [152] / -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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