

KP-1727S4X6518-4F-R



#### **Features**

- Two (2) independent arrays with 2-12° Remote Electrical Tilt (RET) using AISG 2.0
- Internal RET
- · 1710-2690 MHz
- 18 dBi gain

## **Applications**

- · Mobile networks
- · WISP and Wi-Fi Networks
- · GSM, UMTS, LTE, 5G Networks

- · Fiberglass radome for easy and rugged installation
- · Downtilt brackets included
- 4 x 4.3-10 Female Connectors for Low Passive Intermodulation (PIM)
- <-153 dBc PIM at 2x20W tones</p>
- · Public Safety
- · Smart Cities
- · Industrial and Enterprise Networks

#### Description

The KP Performance KP-1727S4X6518-4F-R is a multi-band RET sector antenna with 45 deg. slant and 1710 to 2690 MHz frequency range with low PIM 4.3-10 female connectors. Remote Electrical Tilt (RET) antennas allow for the remote adjustment of its tilt angle. This feature optimizes signal strength and coverage, improving network performance and user experience. Communication networks that require continuous optimization to adjust antenna beams to changing traffic patterns and environmental conditions will benefit from the remote AISG controller ready capabilities of the KP-1727S4X6518-4F-R RET antenna.

KP Performance's KP-1727S4X6518-4F-R has multiple bands operating from 1710 to 1990 MHz with 17.6 dBi gain, 1920 to 2200 MHz with 17.8 dBi gain, 2200 to 2490 MHz with 18.2 dBi gain, and 2490 to 2690 MHz with 18 dBi gain. This directional sector antenna has a maximum input VSWR of 1.5:1 and a maximum input power of 250 watts.

Whether using a handheld controller or a base station radio with integrated AISG controller, the KP-1727S4X6518-4F-R remote management capabilities make it easy to adjust the electrical tilt angle. Its durable fiberglass construction enables it to withstand harsh environments, making it suitable for use in various communication applications. The KP-1727S4X6518-4F-R RET antenna has a Passive Intermodulation rating of -153 dBc, which results in reduced interference, more reliable communication, and increased operational efficiency.

KP Performance has one of the largest in-stock collections of directional antennas with our wide selection of superior quality RF parts, that ship same day. Make your online purchase right now to take advantage of our same-day shipping. For further information on similar products, our expert technical support and knowledgeable sales team can help you get the ideal multi band sector antenna as per your requirement.

### Configuration

1

Design
Band Type
Radiation Pattern
Polarization
Connector Type
Number of Ports
Lightning Protection

Sector Multi Directional 45 Deg. Slant 4.3-10 Female

DC Grounded

#### **Electrical Specifications**

Description Minimum Typical Maximum Units



## KP-1727S4X6518-4F-R



| Frequency Range          | 1,710          |    | 2,690 | MHz     |
|--------------------------|----------------|----|-------|---------|
| Input VSWR               |                |    | 1.5:1 |         |
| Impedance                |                | 50 |       | Ohms    |
| Gain                     |                | 18 |       | dBi     |
| Input Power              |                |    | 250   | Watts   |
| Passive Intermodulation  |                |    | -153  | dBc     |
| Intermodulation IM3 (2×4 | 43dBm carrier) |    |       |         |
| Downtilt                 | 2              |    | 12    | Degrees |
|                          |                |    |       |         |

## Specifications by Band

| Band 1       | Band 2                        | Band 3  | Band 4  | Band 5  | 11-14-  |
|--------------|-------------------------------|---|---|---|---|
|              |                               |   | Danu 4  | Danu 5  | Units   |
| 1.71 to 1.99 | 1.92 to 2.2                   | 2.2 to 2.49   | 2.49 to 2.69  |   | GHz   |
| 17.4         | 17.7                          | 18  | 18.2  |   | dBi   |
| 65           | 65                            | 63  | 64  |   | Degrees   |
| 7.2          | 6.3                           | 5.7   | 5.2   |   | Degrees   |
| 22           | 22                            | 22  | 22  |   | dB  |
| 28           | 28                            | 28  | 28  |   | dB  |
| 28           | 28                            | 28  | 28  |   | dB  |
|              | 17.4<br>65<br>7.2<br>22<br>28 | 17.4     17.7       65     65       7.2     6.3       22     22       28     28 | 17.4     17.7     18       65     65     63       7.2     6.3     5.7       22     22     22       28     28     28 | 17.4     17.7     18     18.2       65     65     63     64       7.2     6.3     5.7     5.2       22     22     22     22       28     28     28     28 | 17.4     17.7     18     18.2       65     65     63     64       7.2     6.3     5.7     5.2       22     22     22     22       28     28     28     28 |

# **Mechanical Specifications**

Radome Material Fiberglass

 Size

 Length
 4.13386 in [105 mm]

 Width
 12.5984 in [320 mm]

 Height
 53.54331 in [136 cm]

 Mounting Mast Diameter
 1.97 to 4.53 in [50.04 to 115.06 mm]

Weight 48.45 lbs [21.98 kg]

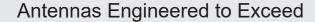
# **Environmental Specifications**

Temperature

Operating Range -50 to +65 deg C

Mechanical Tilt 15 Degrees
Wind Survivability 134.22 MPH [216.01 KPH]

Wind Loading Frontal = 61 lbf (272 N) @ 93 mph (150 km/h) Lateral = 20 lbf (88 N) @ 93 mph (150 km/h)





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Rearside = 68 lbf (304 N) @ 93 mph (150 km/h)

**Plotted and Other Data** 

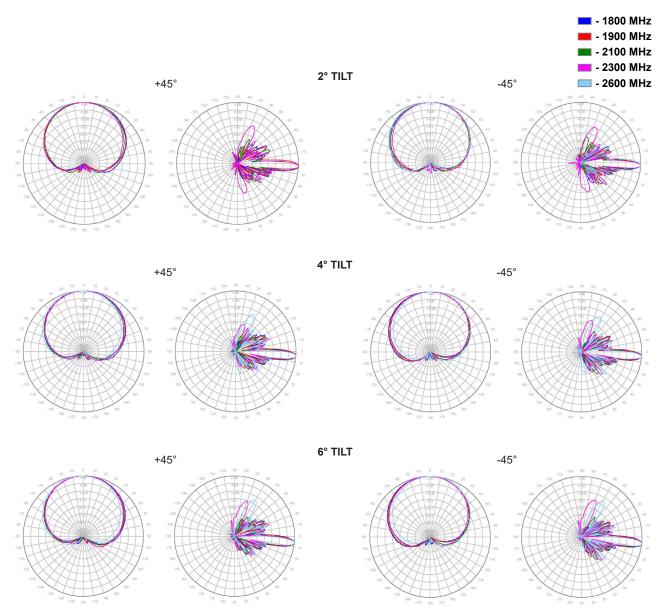
Notes:



# KP-1727S4X6518-4F-R

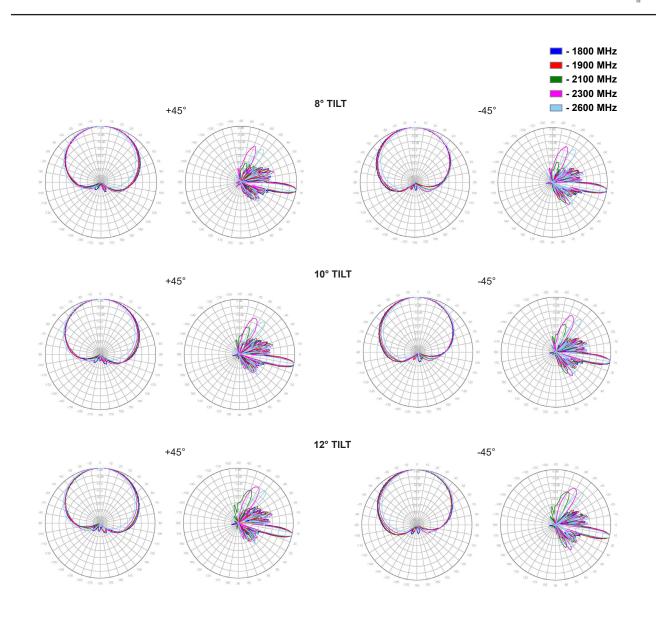


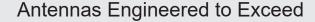
## **Typical Radiation Pattern**





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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: 1710-2690 MHz, 65 Deg. Sector Antenna, 18 dBi gain, 2-12 Deg. RET, 4 x 4.3-10 Female Connector KP-1727S4X6518-4F-R

URL: https://www.kpperformance.com/1710-2690-mhz-65-degree-sector-antenna-18-dbi-gain-2-12-degree-ret-4-x-4.3-10-female-connector-kp-1727s4x6518-4f-r-p.aspx

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# KP-1727S4X6518-4F-R CAD Drawing

