

1710-2690 MHz, 65 Deg. Sector Antenna, 18 dBi gain,
2-12 Deg. RET, 2 x 4.3-10 Female Connector

KP-1727SX6518-4F-R



Features

- 2-12° Remote Electrical Tilt (RET) using AISG 2.0
- Internal RET
- 1710-2690 MHz
- 18 dBi gain
- Fiberglass radome for easy and rugged installation
- Downtilt brackets included
- 2 x 4.3-10 Female Connectors for Low Passive Intermodulation (PIM)
- <-153 dBc PIM at 2x20W tones

Applications

- Mobile networks
- WISP and Wi-Fi Networks
- GSM, UMTS, LTE, 5G Networks
- Public Safety
- Smart Cities
- Industrial and Enterprise Networks

Description

The KP Performance KP-1727SX6518-4F-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-1727SX6518-4F-R RET antenna.

KP Performance's KP-1727SX6518-4F-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-1727SX6518-4F-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-1727SX6518-4F-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 Omni antenna as per your requirement.

Configuration

Design	Sector
Band Type	Multi
Radiation Pattern	Directional
Polarization	45 Deg. Slant
Connector Type	4.3-10 Female
Number of Ports	2
Lightning Protection	DC Grounded

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
-------------	---------	---------	---------	-------

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, 2 x 4.3-10 Female Connector KP-1727SX6518-4F-R](#)

1710-2690 MHz, 65 Deg. Sector Antenna, 18 dBi gain,
2-12 Deg. RET, 2 x 4.3-10 Female Connector

KP-1727SX6518-4F-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 Intermodulation IM3 (2x43dBm carrier)		-153	dBc
Downtilt	2	12	Degrees

Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	1.71 to 1.99	1.92 to 2.2	2.2 to 2.49	2.49 to 2.69		GHz
Gain	17.6	17.8	18.2	18		dBi
Horizontal HPBW	68	64	62	63		Degrees
Vertical HPBW	7.2	6.3	5.7	5.2		Degrees
Cross Polar Ratio HPBW	22	22	22	22		dB
Port to Port Isolation	28	28	28	28		dB
Front to Back Ratio	27	28	28	27		dB

Mechanical Specifications

Radome Material	Fiberglass
Size	
Length	3.14961 in [80 mm]
Width	6.29921 in [160 mm]
Height	53.54331 in [136 cm]
Mounting Mast Diameter	1.97 to 4.53 in [50.04 to 115.06 mm]
Weight	26.2 lbs [11.88 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)

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, 2 x 4.3-10 Female Connector KP-1727SX6518-4F-R](#)

1710-2690 MHz, 65 Deg. Sector Antenna, 18 dBi gain,
2-12 Deg. RET, 2 x 4.3-10 Female Connector

KP-1727SX6518-4F-R



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

Plotted and Other Data

Notes:

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, 2 x 4.3-10 Female Connector KP-1727SX6518-4F-R](#)

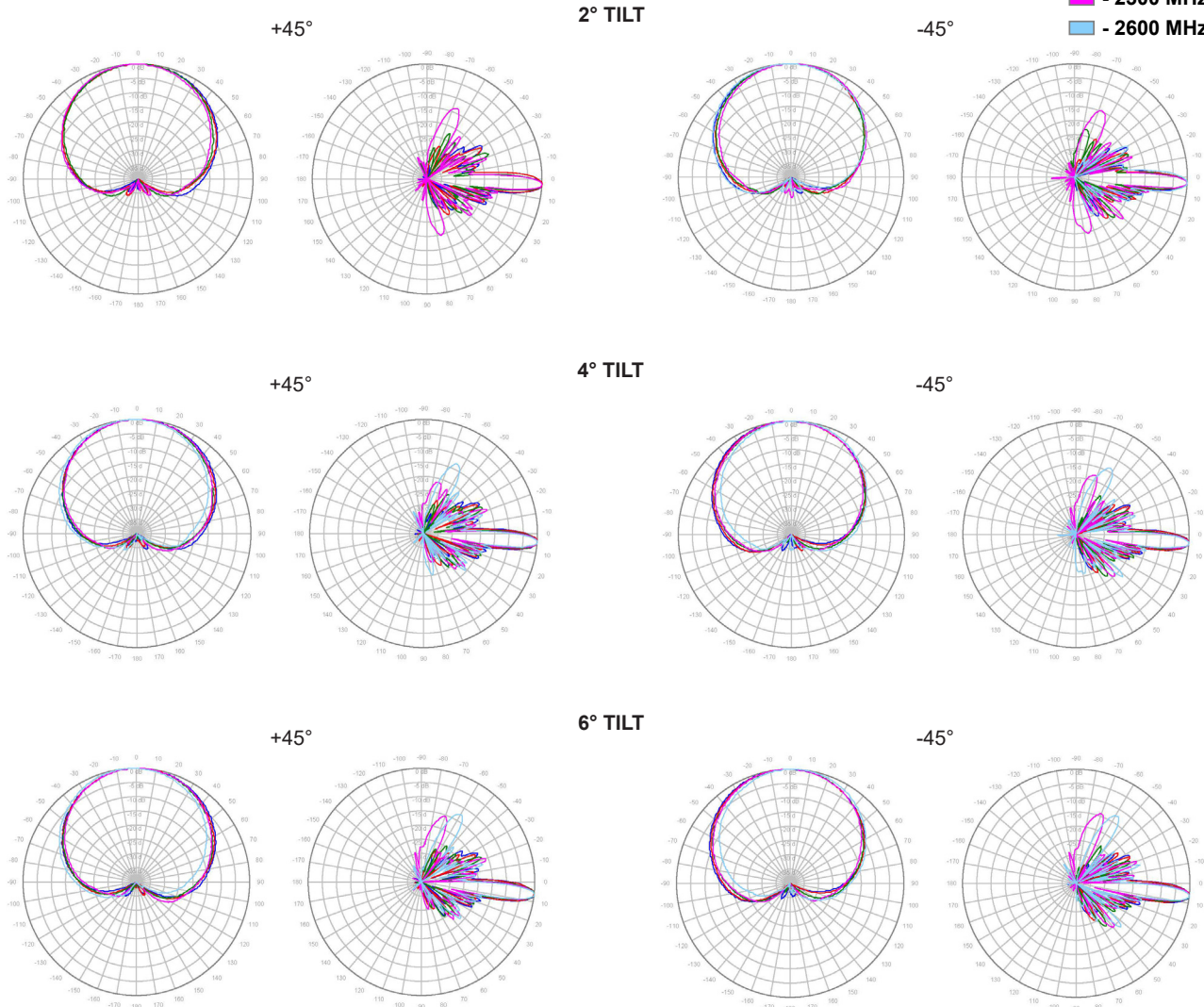
1710-2690 MHz, 65 Deg. Sector Antenna, 18 dBi gain,
 2-12 Deg. RET, 2 x 4.3-10 Female Connector

KP-1727SX6518-4F-R



Typical Radiation Pattern

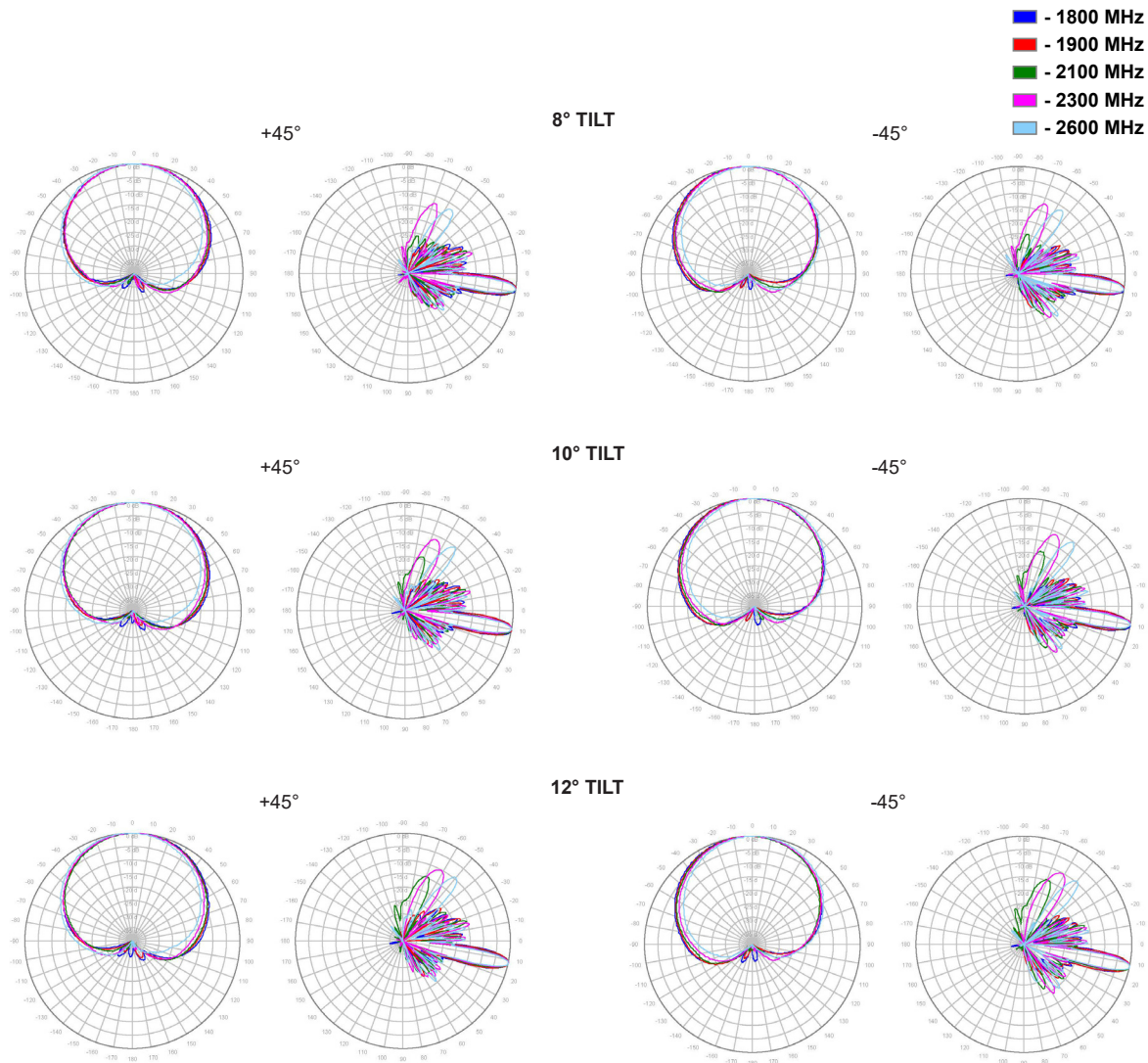
- - 1800 MHz
- - 1900 MHz
- - 2100 MHz
- - 2300 MHz
- - 2600 MHz



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, 2 x 4.3-10 Female Connector KP-1727SX6518-4F-R](#)

1710-2690 MHz, 65 Deg. Sector Antenna, 18 dBi gain,
 2-12 Deg. RET, 2 x 4.3-10 Female Connector

KP-1727SX6518-4F-R



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, 2 x 4.3-10 Female Connector KP-1727SX6518-4F-R](#)

1710-2690 MHz, 65 Deg. Sector Antenna, 18 dBi gain,
2-12 Deg. RET, 2 x 4.3-10 Female Connector

KP-1727SX6518-4F-R



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, 2 x 4.3-10 Female Connector KP-1727SX6518-4F-R](https://www.kpperformance.com/1710-2690-mhz-65-degree-sector-antenna-18-dbi-gain-2-12-degree-ret-2-x-4.3-10-female-connector-kp-1727sx6518-4f-r-p.aspx)

URL: <https://www.kpperformance.com/1710-2690-mhz-65-degree-sector-antenna-18-dbi-gain-2-12-degree-ret-2-x-4.3-10-female-connector-kp-1727sx6518-4f-r-p.aspx>

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.

1710-2690 MHz, 65 Deg. Sector Antenna, 18 dBi gain, 2-12 Deg. RET, 2 x 4.3-10 Female Connector

KP-1727SX6518-4F-R CAD Drawing

