

902 MHz to 928 MHz Panel Antenna, 80-degree, 8 dBi Gain, Horizontal Polarization, N-type female Connector

KP-900H80S-8



Features

- 1-Port, N-type female flat panel
- 902 to 928 MHz, 8 dBi
- VSWR < 1.5:1
- IP 67 Water ingress protection
- Horizontal polarization
- Horizontal beamwidth 80°
- Vertical beamwidth 70°

Applications

- Indoor or outdoor
- High density LAN applications
- Railway applications
- Easy read or write RFID applications
- Vehicle, access, and product line management
- Entry-exit reads

Description

The KP performance KP-900H80S-8 is a 902 MHz to 928 MHz panel antenna that is ideal for hospitality, industrial, municipal, rural high-speed internet and high-density Wi-Fi applications. This antenna features a compact design, a pole mount, horizontal polarization, a single band type and directional radiation pattern. Our 928 MHz maximum frequency panel antenna consists of an 80-degree beam width and an 8 dBi gain.

This antenna includes N-type female connectors and is constructed of a UV resistant ABS plastic radome with an aluminum backplate. Due to its size and directional characteristics, KP Performance panel antennas are frequently used for wireless networking or cellular or mobile base stations. The KP-900H80S-8 directional antenna has 50 watts of input power, 80-degree horizontal (azimuth) HPBW and 70-degree vertical (elevation) HPBW.

This KP-900H80S-8 panel antenna comes equipped with die-cast aluminum brackets and stainless steel hardware that assure a long service life. KP Performance directional antenna features a DC ground for lightning protection and is waterproof. The dimensions of these antennas are 10.43 inches long, 10.43 inches wide, 4.33 inches high and the mounting mast diameter ranges from 1.18 to 2.36 inches. This panel antenna is ideally suited for railway applications due to its RFID capability and greater bandwidth, which increase successful RFID read rates on passive railway cars.

These 8 dBi panel antennas from KP Performance are frequently utilized as a client-side antennas, instead of a reflector dish due to their high gain and moderate beam width for its relatively small size. The 902 MHz to 928 MHz directional antenna has a 15 dB front-to-back ratio, a 50 ohm impedance and an input VSWR of 1.5:1. The temperature range for this antenna is -40 to 60 degrees C. Our KP-900H80S-8 compact designed panel antenna is also used for railway and vehicle management, industry manufacturing, product line, access management, entry-exit reads and any other RFID applications.

The KP performance has the largest in-stock collection of 8 dBi gain panel antennas for your critical equipment and power sources. Quickly make your online purchase right now to take advantage of our same business day shipping. For further information on similar products, our expert technical support and knowledgeable sales team can help you get the 902 MHz to 928 MHz panel antenna as per your requirements.

Configuration

Design	Flat Panel
Band Type	Single
Radiation Pattern	Directional
Polarization	Horizontal
Connector Type	N Female
Lightning Protection	DC Grounded

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [902 MHz to 928 MHz Panel Antenna, 80-degree, 8 dBi Gain, Horizontal Polarization, N-type female Connector KP-900H80S-8](#)

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	902		928	MHz
Input VSWR			1.5:1	
Impedance		50		Ohms
Gain		8		dBi
Front to Back Ratio	15			dB
Electrical Downtilt		0		Degrees
Horizontal (Azimuth) HPBW		80		Degrees
Vertical (Elevation) HPBW		70		Degrees
Input Power			50	Watts
Return Loss		10		dB

Mechanical Specifications

Size

Length	10.43 in [264.92 mm]
Width	10.43 in [264.92 mm]
Height	4.33 in [109.98 mm]
Mounting Mast Diameter	1.1811 to 2.3622 in [30.00 to 60.00 mm]
Weight	4.85 lbs [2.2 kg]

Environmental Specifications

Temperature

Operating Range	-40 to +60 deg C
Environment	Waterproof
Wind Survivability	134.216 MPH [216 KPH]
Wind Loading	

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

IP Rating	IP67
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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.

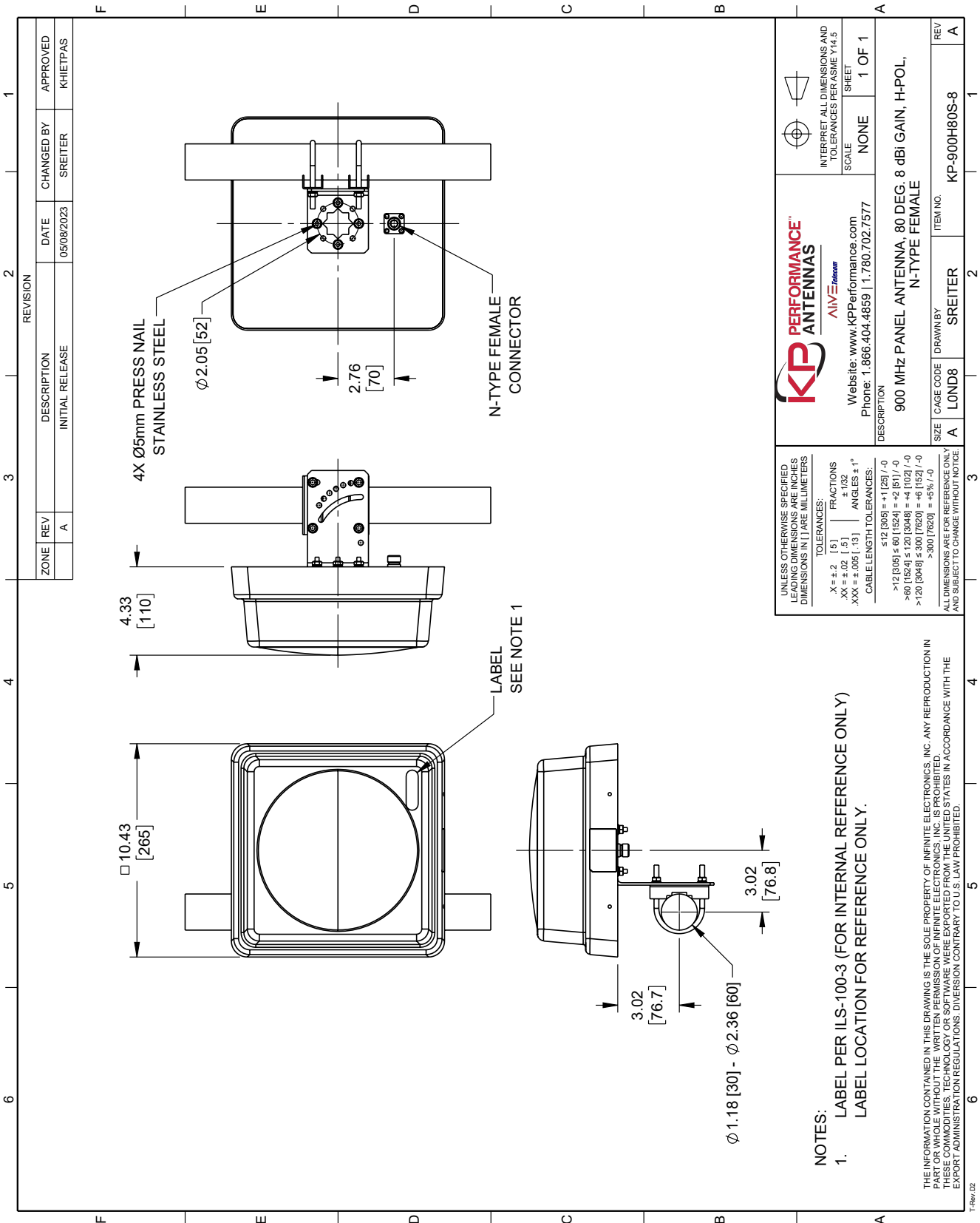
Dedicated to serving the needs of the Wireless Internet Service Provider (WISP) market, KP Performance Antennas offers purpose built products that reliably perform in the field. KP Performance Antennas product line consists of Yagi, Grid, Omni, Dish and other style antennas that operate in the 900 MHz,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

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URL: <https://www.kpperformance.com/902-mhz-to-928-mhz-panel-antenna-80-degree-8-dbi-gain-horizontal-polarization-n-type-female-connector-kp-900h80s-8-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.

KP-900H80S-8 CAD Drawing



ZONE		REVISION		CHANGED BY		APPROVED	
A	REV	DESCRIPTION	DATE	SREITER	KHIETPAS		
	A	INITIAL RELEASE	05/08/2023				

KP PERFORMANCE ANTENNAS
 AINVE *Antenna*

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

DESCRIPTION: 900 MHz PANEL ANTENNA, 80 DEG. 8 dBi GAIN, H-POL, N-TYPE FEMALE

SIZE: A
 CAGE CODE: LOND8
 DRAWN BY: SREITER
 ITEM NO.: KP-900H80S-8

REV: A

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

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

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.

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NOTES:
 1. LABEL PER ILS-100-3 (FOR INTERNAL REFERENCE ONLY)
 LABEL LOCATION FOR REFERENCE ONLY.

T-Rev: 02