

AS-48461 SERIES DUAL-POLARIZED QUAD-RIDGED HORN ANTENNA

Model AS-48461 Dual-Polarized Quad-Ridged Horn Antenna is an extremely broadband antenna, capable of radiating orthogonally polarized moderately directive patterns over a bandwidth greater than 9:1. In addition to excellent interport amplitude and phase match, the horn exhibits exceptional isolation between the two coaxial terminals.

Although the AS-48461 horn antenna has been widely applied as an individual test source and as array elements in electronic environment simulators, it is also ideally adaptive for wideband surveillance and direction-finding systems. Optional configurations that are available include circular polarization, polarization switching, and higher power capability (see available configurations below).

PARAMETER	SPECIFICATION
Electrical	
Frequency range	2-18 GHz
VSWR	2.5:1 max
Gain	5 dBi - 18 dBi
Impedence	50 Ohms reference
Polarization	Simultaneous horizontal and vertical
Beamwidth 3dB (BW)	60° - 10°, nom
Beam Squint (3 dB bisector)	BW≤40°: (BW/10)°, max BW>40°: 4°, max
Cross polarization	-20 dB, max
Isolation between ports	20 dB, min, 2 - 4 GHz 25 dB, min, 4 - 18 GHz
Phase tracking between ports	±17° max
Amplitude tracking between ports	±1.5 dB, max
Max power handling (each connector)	10 watts CW (-01, -03, -04, -05, -06) 100 watts CW (-02), 200 watts CW (-07)
Mechanical	
Connector	SMA female
Weight	4.4 lbs
Finish	Flat black
Available Configurations	
AS-48461-01 (basic), AS-48461-02 (high power), AS-48461-03 (with hybrid), AS-48461-04 (with switch), AS-48461-05 (with hybrid and switch), AS-4841-06 (with dust cover), AS-48461-07 (200 W power)	



KEY FEATURES

- > Simultaneous horizontal and vertical polarization
- > Amplitude and phase tracking
- > Interport isolation
- > Surveillance and directionfinding applications

For further details and specifications, contact the factory at antenna.info@L3Harris.com

AS-48461 Series Dual-Polarized Quad-Ridged Horn Antenna

© 2020 L3Harris Technologies, Inc. | 04/2020 | 60189 | d1071 | CB 5207-009 (LB72) Approved for Public Release 10-2010, EAID EXPID9473

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



1500 New Horizons Blvd Amityville, NY 11701 t 631 630 4000 antenna.info@L3Harris.com