



## Product Description

The H5812-SMAF Helical Antenna operates across a wideband frequency range of 4400–6000 MHz, providing stable, high-performance connectivity for demanding communication systems. Designed for C-UAS applications, industrial automation, wireless security, and defense operations, it supports reliable data transmission with reduced signal interference. Its rugged construction ensures consistent operation in challenging environmental and field conditions.

## Product Features

- **Wideband frequency coverage: 4400–6000 MHz**
- **Optimized design for improved interference resistance and signal integrity.**
- **Robust materials for durable performance in outdoor and harsh environments.**
- **Suitable for C-UAS, defense, security, industrial automation, perimeter protection, and wireless networking.**



## General Specifications

Model Name	H5812-SMAF
Part Number	99283501
Antenna Type	Helical
Radiation Pattern	Directional
Enclosure	Polycarbonate Radome
Color	Black, Matte finish (RAL 9005)
NSN#	X
Compliances	RoHS, REACH

## Electrical Specifications

Frequency Range	MHz	4400 - 6000
Gain	dBic	12.0 @ 5600 MHz
Polarization		RHCP
VSWR	Max	2:1
Impedance	$\Omega$	50
Max Input Power	W	25
Front/Back Ratio Min.	dB	20
HPBW	°	64 @ 4400 MHz, 45 @ 6000 MHz

## Mechanical Specifications

Length	in (mm)	4.33 (110)
Weight	lbs. (kg)	0.35 (0.16)
Radome Diameter	in (mm)	1.5 (38)
Ground Plane Diameter	in (mm)	2 (51)
Connector Type		SMAF (Female)
Number of Connectors		1

## Environmental & Structural Specifications

Operating Temperature	°F (°C)	-40 to 158 (-40 to 70)
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## Mounting Specifications

Mount Type	Panel (3 x 8-32 Studs)
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