

Electrical specifications

Frequency Range	2 – 18	[GHz]
VSWR (max.)	≤ 2.6	–
S_{11} (max.)	≤ -7	[dB]
Impedance	50	[Ω]
Connector	SMA	–
Power (CW)	10	[W]
Power (Impulse)	20	[W]
Gain	5 – 19	[dBi]
Polarization	Dual Linear	–
Isolation	≤ -20	[dB]

Physical specifications

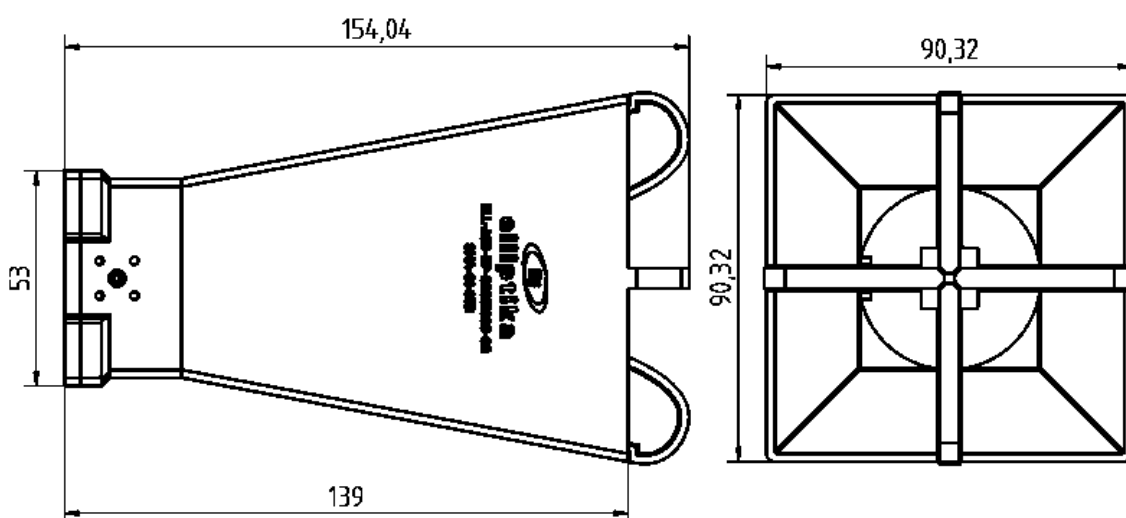
W x L x H	see p. 2	[mm ³]
Weight	see p. 2	[g]



This antenna and its various versions are 3D-printed in plastic before undergoing a copper metallization process with a tin finish. They are also coated with a silicone layer.

All the following graphs are based on electromagnetic simulations

Technical Drawing





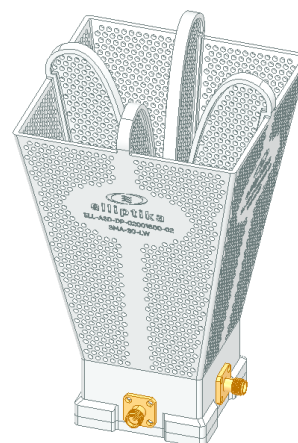
Quad Ridged Horn Antenna 2 – 18 GHz

Design

Standard (STD)



Light Weight (LW)



W x L x H
[mm³]

91 x 154 x 91

91 x 154 x 91

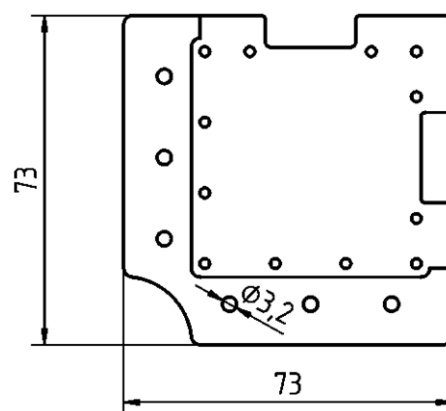
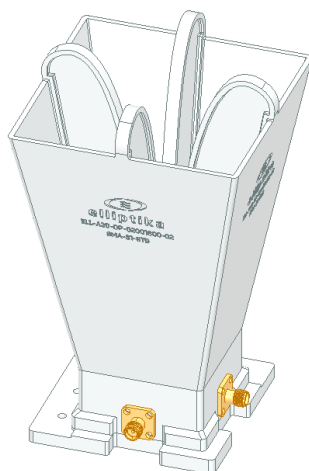
Weight [g]

~220

~170

Option (no additional cost)

Rear Mounting (S1)



W x L x H

91 x 156 x 91

[mm³]

Additional Weight

~ + 27

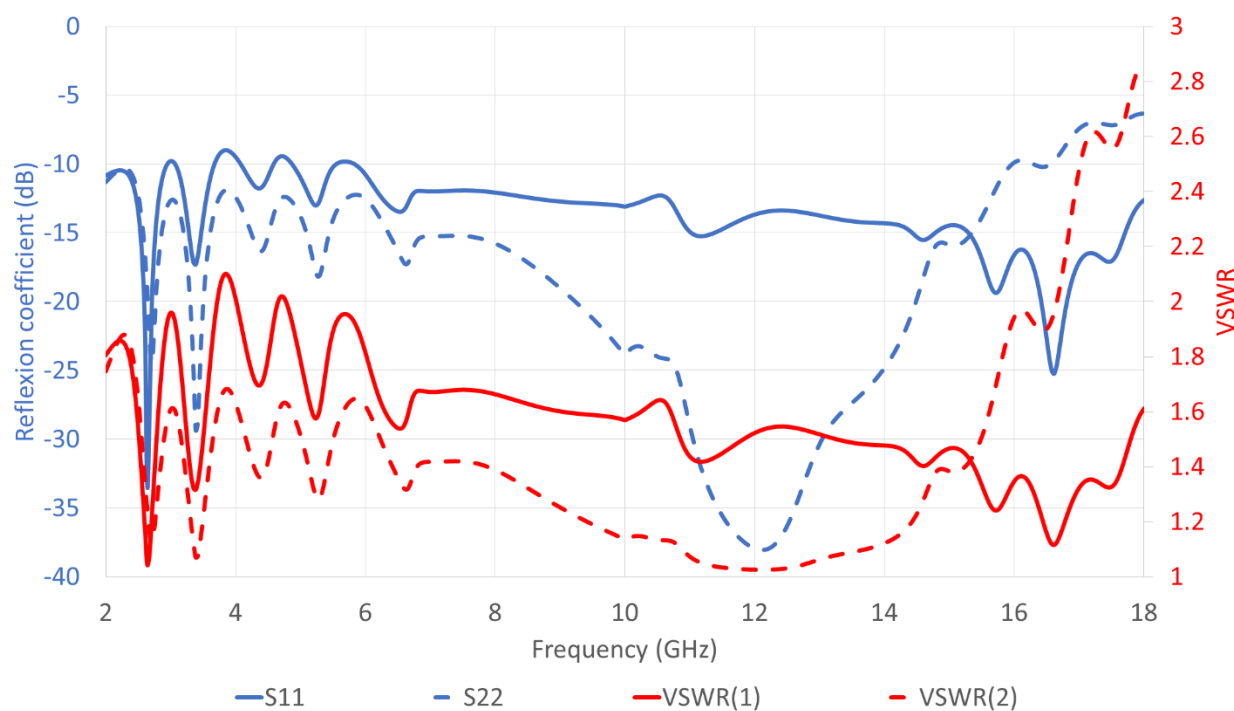
[g]



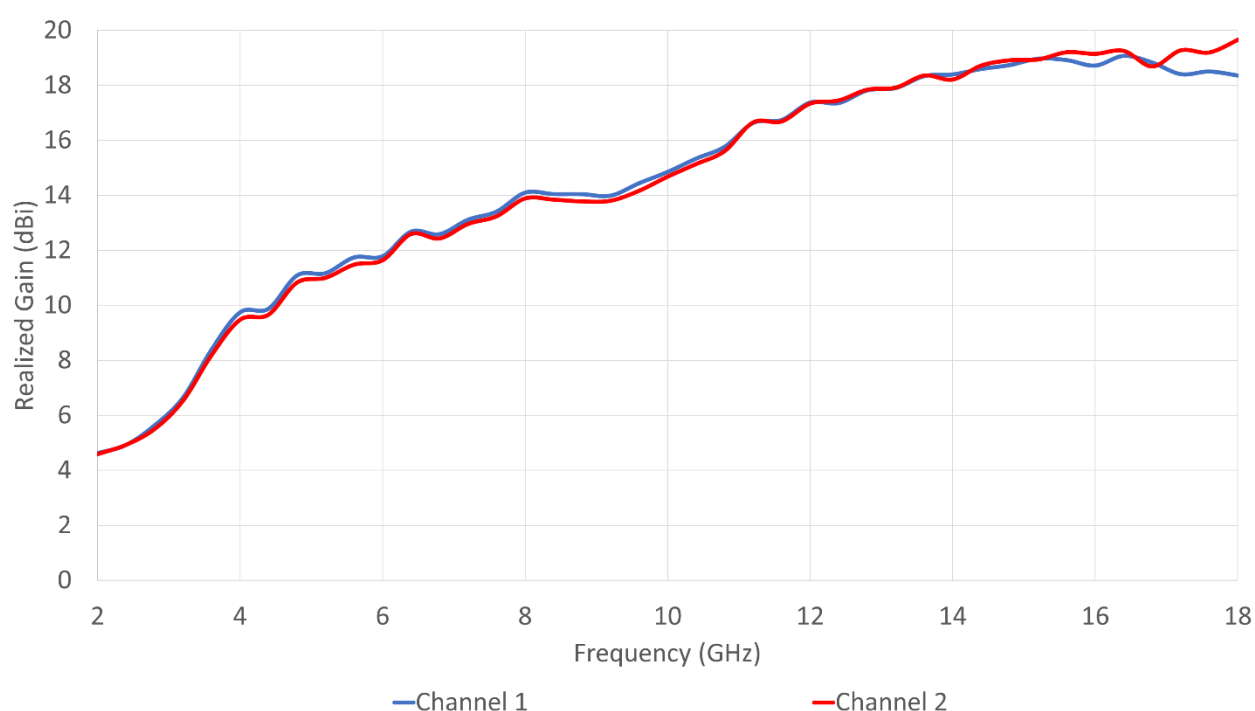
Quad Ridged Horn Antenna

2 – 18 GHz

Reflexion coefficient



Gain

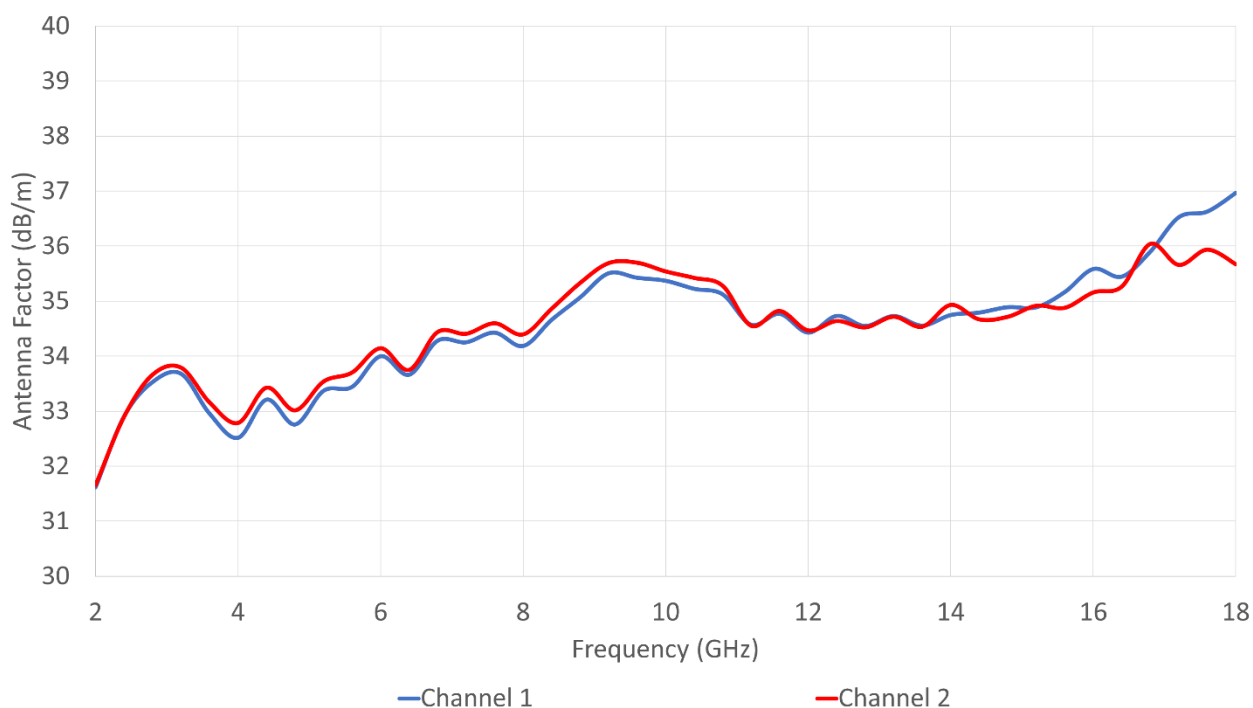




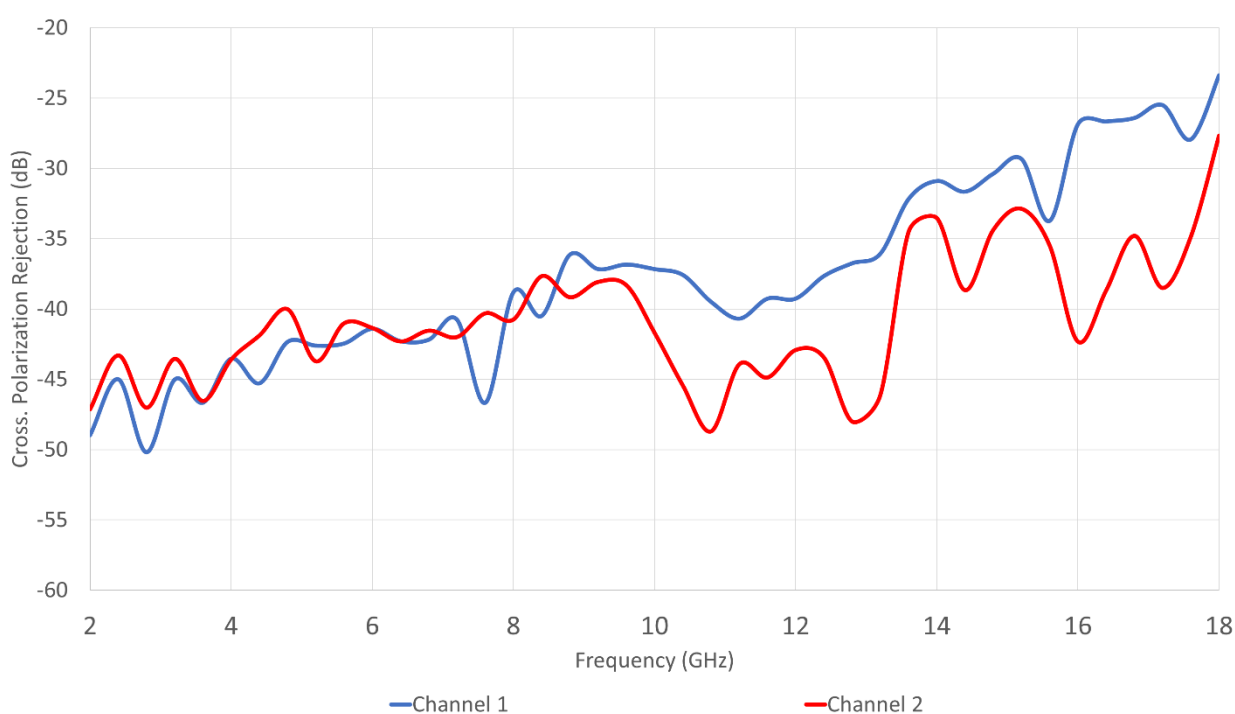
Quad Ridged Horn Antenna

2 – 18 GHz

Antenna Factor



Cross. Pol. Rejection

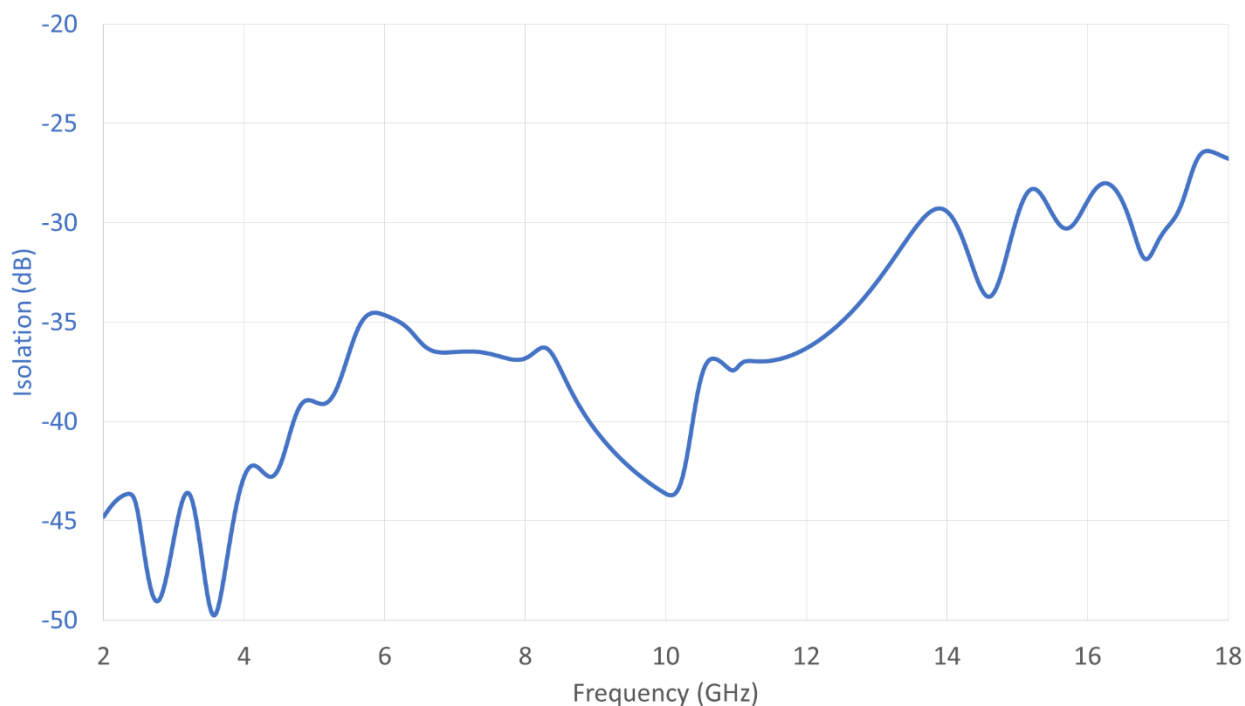




Quad Ridged Horn Antenna

2 – 18 GHz

Isolation

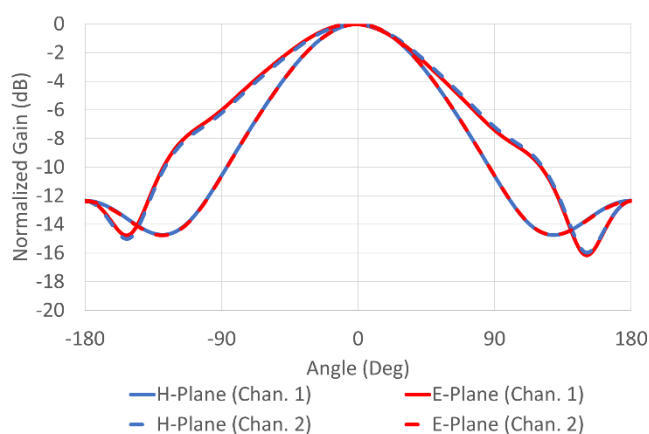




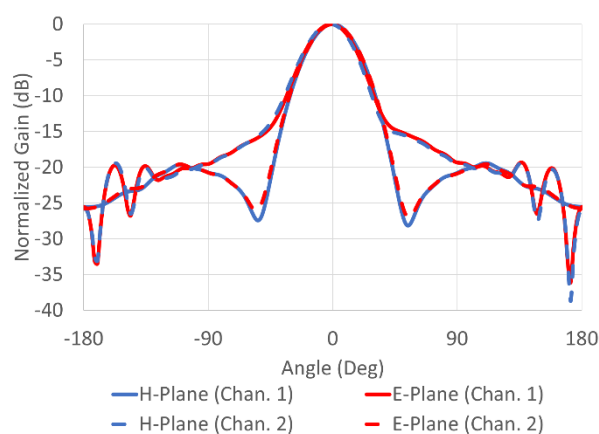
Quad Ridged Horn Antenna 2 – 18 GHz

Radiation patterns

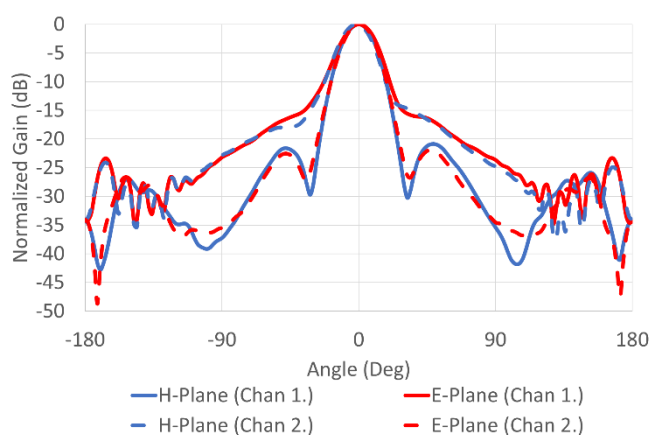
2 GHz



7.6 GHz



12.4 GHz



18 GHz

