

# Dual Circular Polarized Scalar Feed Horn Antenna

17.3-31 GHz, 2.92 mm (f), 14.5 dB Directivity, 1 dB Axial Ratio

## DESCRIPTION

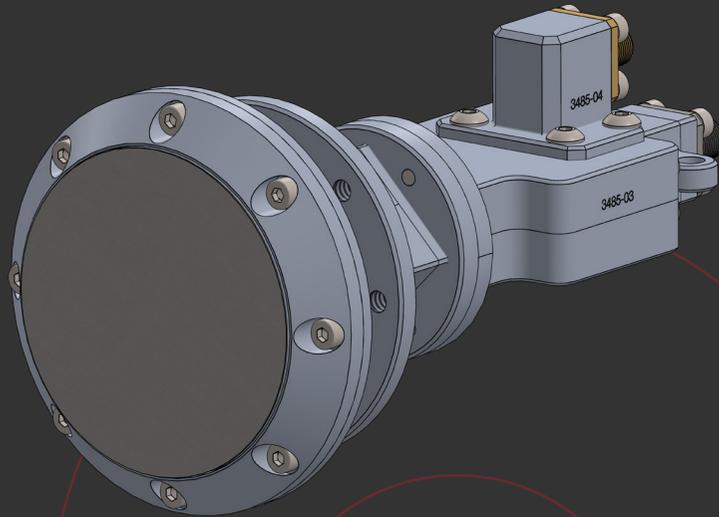
Anteral's DCPSFHA-15-SAT-KKa-02 is a two-port dual-circular polarized antenna which operates from 17.3 to 31 GHz.

This system benefits from a high performance polarizer which achieves RHCP and LHCP with less than 1 dB typical axial ratio. It is fed by a high-performance orthomode transducer, which achieves more than 20-dB isolation between the RHCP and LHCP channels, and whose outputs are connected to two custom transitions to 2.92 mm (f).

Therefore, Anteral's DCPSFHA-15-SAT-KKa-02 benefits from two RHCP and LHCP ports while being compact and lightweight..

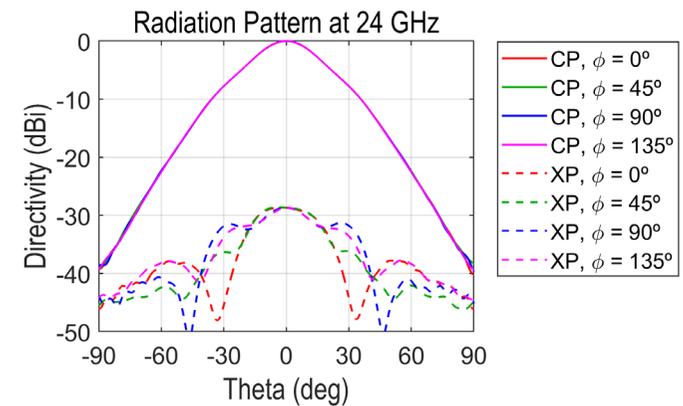
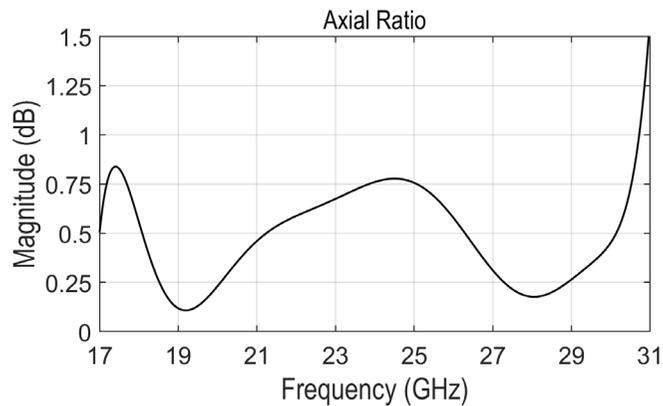
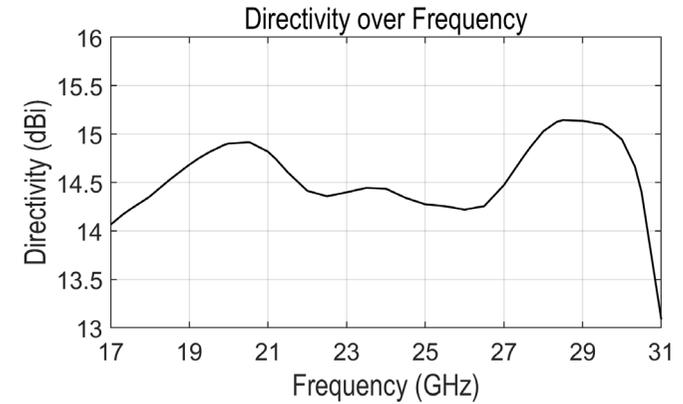
## APPLICATIONS

DCPSFHA-15-SAT-KKa-02 is specially useful for 5G and CATR systems. A radome can be requested to ensure a proper outdoor performance. Moreover, clamping structure for CATR applications can be designed ad-hoc.



### ELECTRICAL SPECIFICATIONS

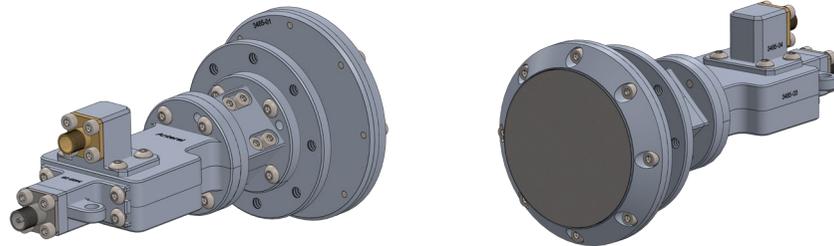
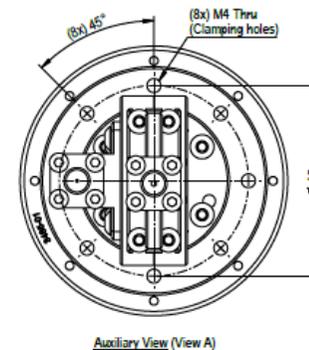
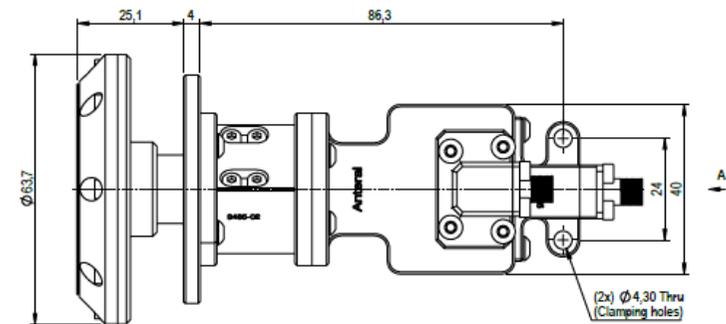
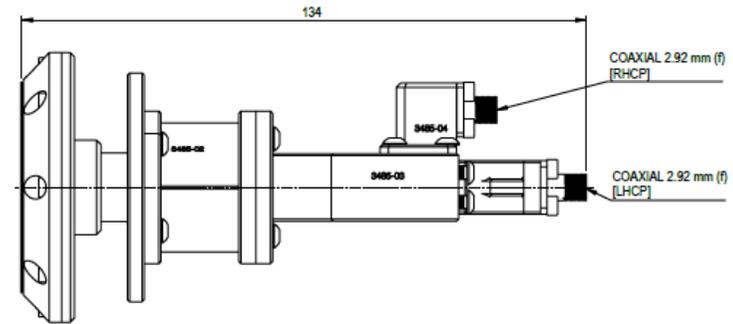
Parameter	Typical values
Frequency	17.3 - 31 GHz
Return Loss	20 dB
Insertion Loss	0.5 dB
Isolation	20 dB
Axial Ratio	1 dB
Directivity	14.5 dBi
XP ( $30^\circ < \text{Theta (deg)} < 30^\circ$ )	27 dB



### MECHANICAL SPECIFICATIONS

Parameter	Description
RHCP Port	2.92 mm (f)
LHCP Port	2.92 mm (f)
Size	63.7 x 63.7 x 134 mm
Weight	230 g
Material	Aluminum

### MECHANICAL OUTLINE



### Additional notes

All values are typical and simulated. Actual values could vary slightly. The complete performance is checked before delivery to fulfill specifications.



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