Your Partner in Antenna Technology

C-band & L/S-band Telemetry Horn Antennas
Models HCDL14-19-S & HCDL20-48-S

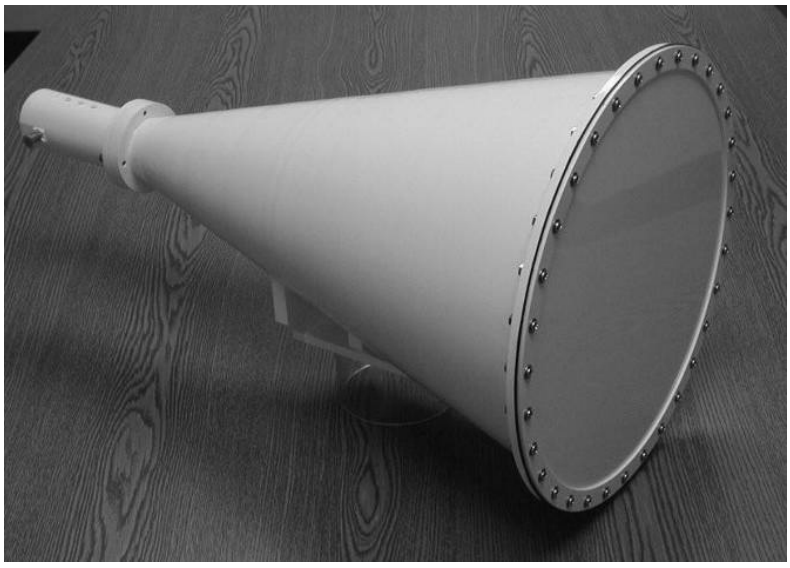
Below is information on a pair of dual linear polarized horn antennas designed and tested for one of the US telemetry flight test ranges. The horns are conical in shape with a sealed aperture window. Inputs are SMA female. The operating frequency of the L/S-band horn is 1.4-2.4 GHz. The operating frequency of the C-band horn is 4.40-5.15 GHz. Alternate bandwidths are available. There is a bracket on each model for mounting the horn to a flat surface. The horns are constructed of aluminum and sealed for outdoor use. The finish is gold iridite per MIL-C-5541E with class 1A polyurethane white topcoat Color No. 17875 per FED-STD-595. Every horn is tested for swept return loss data prior to shipment. Serialized copies of the return loss data are shipped with each horn. mWAVE can furnish an outline drawing of each horn model with mounting details upon request.

Dual Linear C-band Horn
Model HCDL20-48-S

Nominal RF Performance

Frequency (GHz)	Gain (dBil)	HPBW (deg.)		Port-to-Port Isolation (dB)	Return Loss (dB)
		E-Plane	H-Plane		
4.4	20.5	14.0	17.0	>40	12.6
4.8	21.0	14.0	16.0	>40	25.9
5.15	21.5	13.5	15.0	>40	30.0

Dual Linear C-band Horn



Specifications are subject to change without notice. Rev. 4/21/11 CJM

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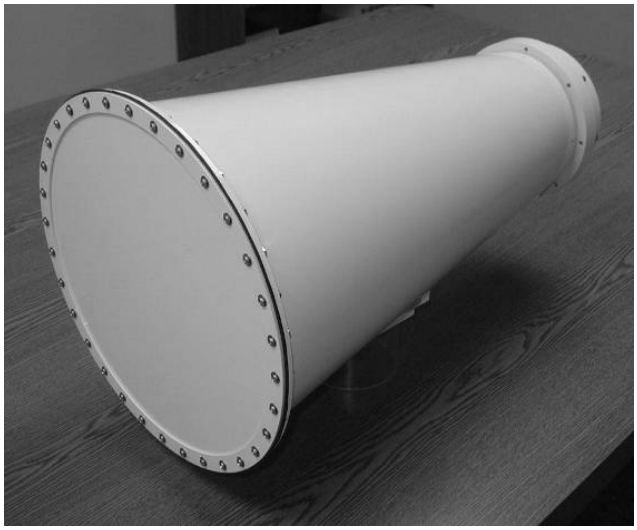
Dual Linear L/S-band Horn
Model HCDL14-19-S

Nominal RF Performance

Frequency (GHz)	Gain (dBil)	HPBW (deg.)		Port-to-Port Isolation (dB)	Return Loss (dB)
		E-Plane	H-Plane		
1.4	12.6	37.5	45.5	>40	11.8
1.9	15.0	30.0	36.0	>40	17.9
2.4	16.9	24.5	29.5	>40	19.4

Dual Linear L/S-band Horn



RF Inputs

Rear View

NOTES:

1) Dual CP versions are available upon request.
2) Additional RF components such as Diplexer, LNA, RF switch, and DC power supply can be integrated within a rear sealed enclosure.
3) Additional mounting plates or alternate mounting bracket can be added to suit customer specific mounting requirements.
4) Alternate coaxial input styles are available upon request.
5) Higher and lower gain models are available upon request.
6) This information sheet is proprietary. Do not distribute without written authorization from mWAVE Industries, LLC.

Please contact mWAVE Industries, LLC with your antenna requirements to see how we can be of service. We welcome your inquiry and look forward to becoming one of your trusted partners.

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