Model

FPVCL-043-N

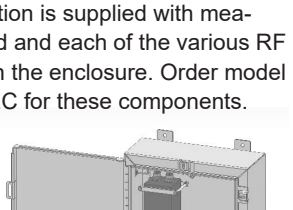
UHF Reduced Blockage Vertex Mounted
LHCP Feed for a 3.8m Reflector

Features

- Self-supporting UHF LHCP vertex mounted feed for 3.8m reflector
- Substantially less central feed blockage associated with a conventional UHF prime focus feed
- Reduced blockage is achieved by this innovative feed design and provides increased antenna gain and improved side lobe level performance
- Vertex mounted feed does not require struts or guy wires
- An integral monopod support provides a focal adjustment of ± 3” along the focal axis of the reflector to accommodate feed focusing
- Input on this feed is a type N female located at the base of the monopod support
- Weather sealed feed designed for -40°F to +140°F temperatures
- Engineered for corrosive atmosphere as encountered in coastal regions and/or heavily industrialized areas
- Wind surival rating of 125 mph (201 kmh) winds, 1.0” radial ice

The mWAVE FPVCL-043-N is available with an optional sealed enclosure with fully integrated diplexer, LNA, DC power supply, and interconnecting low-loss cable assemblies. This option is supplied with measured test data for the feed and each of the various RF components housed within the enclosure. Order model number FPVCL-043-N-CEC for these components.

Sealed enclosure with diplexer, LNA and power supply.



Specifications

Description	*Value*	*Units*	*Type*
Compatiable Reflector Size	3.8	Meter	Nominal
Freq. Low	401	GHz	Min
Freq. High	476	GHz	Max
Polarization	LHCP		
Axial ratio	<1.0	dB	Nominal
Return Loss		dB	
VSWR	1.4:1		
RF Interface	Type N Female		
Finish, reflector	Paint		
Color	White, Color No. 17875 PER FED-STD-595		
Finish, machined aluminum components	Chemical Conversion per MIL-DTL-5541F, Type 2, Class 1A, Clear ROHS Compliant		

Notes:
(1.) Referenced product specifications are subject to change without notice.
(2.) Designed, Engineered, and Manufactured in Windham, ME USA
(3.) mWAVE Industries is part of the Alaris Holdings Group of Companies.

mWAVE source reference UHF LHCP Vertex Mounted Feed P09050 rev 4-22-11

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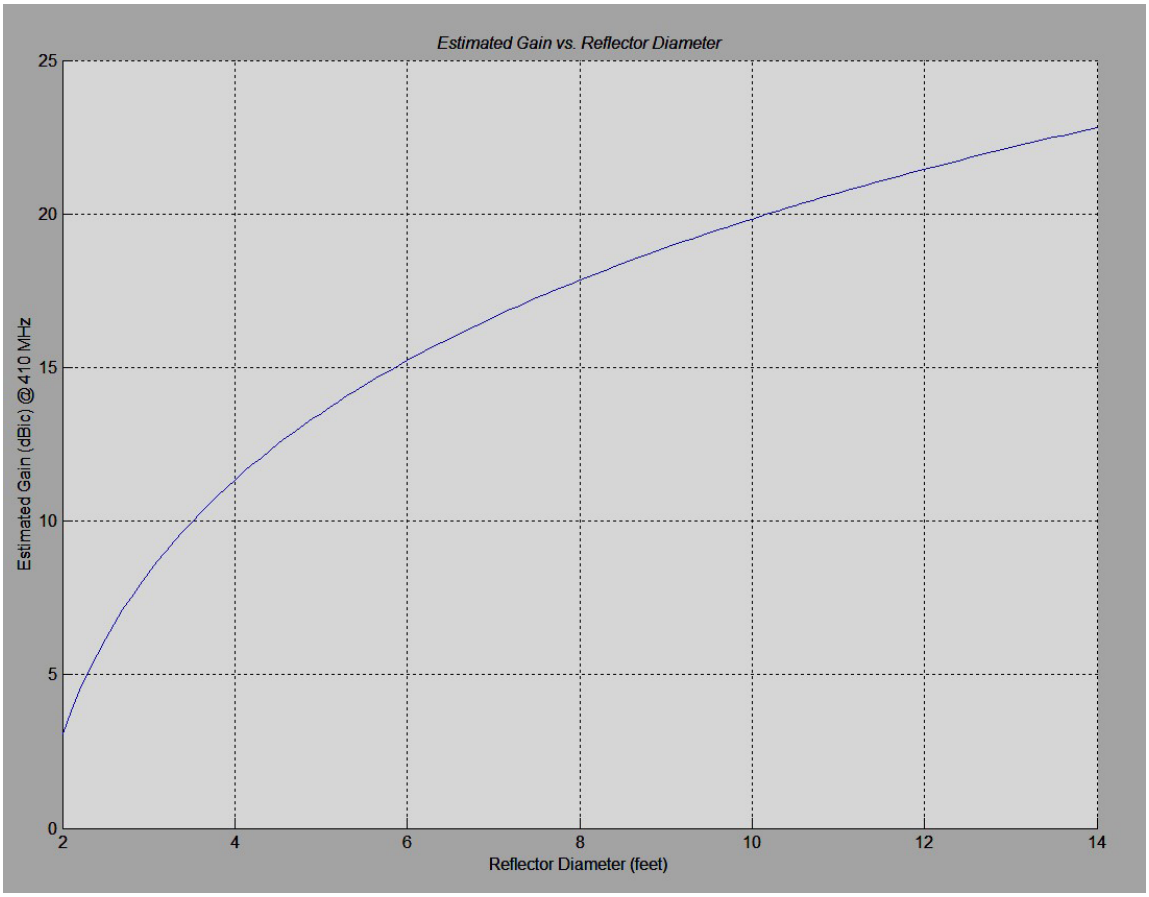
LHCP Feed for a 3.8m Reflector

SPECIAL NOTE: This style feed can support high power handling requirements making it an excellent candidate for high gain FTS applications. Combining our vertex mounted feed with an appropriately sized reflector yields a high gain FTS antenna at a fraction of the cost of conventional dual and quad helix antennas. Moreover, our vertex mounted feed is weather sealed whereas conventional dual and quad helix antennas are often exposed to the open environment resulting in mechanical and RF degradation. The graph below shows the Estimated Gain vs. Reflector Diameter when combining our vertex mounted feed with a paraboloidal reflector.

UHF Reflector Antenna Gain Estimates using mWAVE Vertex Mounted Feed



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