

### Model

## **FPP1-103A-S-LX**

8.000 - 12.000 GHz

Single Linear Wide Band Prime Focus Antenna Feed High Cross Pol.

mWAVE's FPP1-103A-S-LX operates at 8.000 – 12.000 GHz and is a single linear prime focus feed that is equipped with a SMA female input. This model is one of mWAVE's comphrensive line of scalar feeds which operate over full waveguide frequency bands.

These antenna feeds exhibit superior cross polarization discrimination and low VSWR. All feeds share identical mounting and focal point placement offering a truly interchangeable feed family system. This feature makes them excellent candidates for outfitting antenna test ranges, portable multi-band coverage communications systems and can be incorporated into and used for numerous other wideband or narrow band communications applications.



# Configuration

Frequency Band 8.000 - 12.000 GHz

Type Single Linear Wide Band Prime Focus Antenna Feed (Dual and CP available)

Feed Input SMA female

Mounting 6-in (152-mm) dia. mounting surface (4) tapped #10-32 holes on a 5.25" DBC f/d ratio reflector Designed for a 0.375 f/d ratio reflector can be used with 0.35 - 0.42 f/d reflectors.

On-axis axial ratio 1.5 dB or less
On-axis cross pol 38 dB min. or better

Average VSWR <1.5:1

Nominal gain Approximately 8.5-10.5 dBic over the frequency band

Power 20W CW power handling (alternate higher power models available)

Environmental use Sealed for outdoor use

Construction Machined from high-strength 6061-T6 aluminum stock

Finish Chemical Conversion per MIL-DTL-5541F, Type 2, Class 1A, Clear finish

Origin Engineered and Manufactured in Windham, ME USA

#### Specification Notes:

- 1. Optional waveguide polarizers are available for scalar feed models for CP requirements.
- 2. Dual linear and dual circular versions of this antenna feed design are also available.
- 3. Scalar feed models can be optimized for alternate f/d ratio reflectors.
- 4. An additional mounting plate can be added to suit customer specific mounting requirements.
- 5. Alternate coaxial input styles are available upon request.
- 6. Scalar feeds with waveguide inputs are capable of handling higher transmit power.

Notes:

- (1.) Referenced product specifications are subject to change without notice. Designed, Engineered, and Manufactured in Windham, ME USA mWAVE Industries is part of the Alaris Holdings Group of Companies.
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Form: FPP1-103A-S-LX-230310\_rev.0-DS



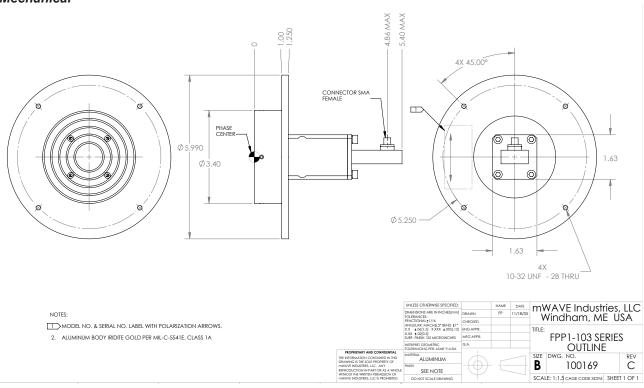


# Model

# **FPP1-103A-S-LX**

8.000 - 12.000 GHz Single Linear Wide Band Prime Focus Antenna Feed High Cross Pol.

### Mechanical



Dimensions for Scalar Feeds (FPP1-103-S shown)

#### Specification Notes:

- Optional waveguide polarizers are available for scalar feed models for CP requirements.
   Dual linear and dual circular versions of the Model FPP2-19-S antenna feed are also available.
- Scalar feed models can be optimized for alternate f/d ratio reflectors.
- 4. An additional mounting plate can be added to suit customer specific mounting requirements.
- 5. Alternate coaxial input styles are available upon request.
- 6. Scalar feeds with waveguide inputs are capable of handling higher transmit power.

Notes:

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