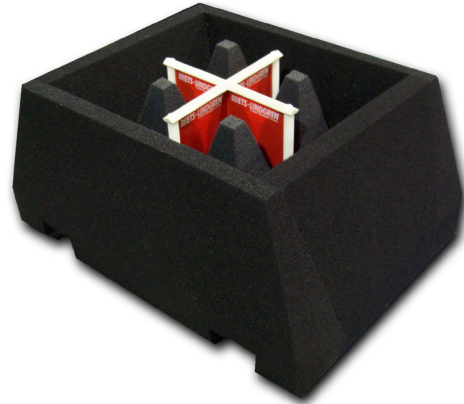


*Wireless Antennas*  
**Absorber Nested  
Dual-Polarized Dual-Vivaldi  
Array Antenna**

Model 3165-01

**FEATURES:**

- **700 MHz – 6 GHz Frequency Range**
- **Low Reflectivity**
- **Dual-Linear Polarization**
- **Low VSWR with High Directivity**
- **Multiple Mounting Schemes**



*ETS-Lindgren's Model 3165-01 Absorber Nested  
Dual-Polarized Dual-Vivaldi Array Antenna*

**ETS-LINDGREN'S MODEL 3165-01  
ABSORBER NESTED DUAL-POLARIZED  
DUAL-VIVALDI ARRAY ANTENNA**

is designed for applications where source antenna effects must be minimized, such as chambers where the device under test (DUT) is illuminated from different directions.

**FEATURES**

**Frequency Range**

The Model 3165-01 has a frequency range of 700 MHz - 6 GHz, which covers most cell phone, Wi-Fi, WiMAX and GPS bands.

**Low Reflectivity**

This antenna is designed to be nested in the anechoic absorber lining of a chamber. Installed in this configuration, the antenna exhibits very low reflectivity, even when the input

ports are mismatched. The normal incidence reflectivity is approximately -40 dB for a majority of the frequency range.

**Dual-Linear Polarization**

The Model 3165-01 is a dual-linearly polarized antenna, capable of measuring two orthogonal components of the field simultaneously.

**Low VSWR and High Directivity**

The Model 3165-01 possesses very low VSWR, while maintaining high directivity. This allows use in the illumination of DUTs, without affecting adjacent antennas in a multi-antenna installation.

**Several Mounting Options**

For installation convenience, this antenna offers several mounting options (specify when ordering).

The 3165-01-MG allows for magnetic attachment to a positioner, existing bracket or shielding.

The 3165-01-SQ includes a fixture allowing for manual adjustment of tilt and pan of the antenna. These brackets mount to a 50 mm by 50 mm square tube.

The 3165-01-RD mount includes a fixture for manual adjustment of tilt and pan antenna, however it is designed for attachment to a 50 mm round tube (i.e., pvc pipe mounting).

**STANDARD CONFIGURATION**

- Antenna including the selected mounting (specify when ordering)
- Individually calibrated at 1m per the SAE ARP 958

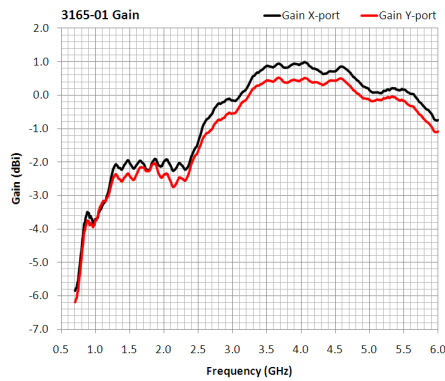
### Electrical Specifications

MODEL	FREQUENCY RANGE	CROSS POLARIZATION ISOLATION	MAXIMUM CONTINUOUS POWER	IMPEDANCE (NOMINAL)	CONNECTORS
3165-01	700 MHz - 6 GHz	> 25 dB	5 watts	50 Ω	(2) SMA Female

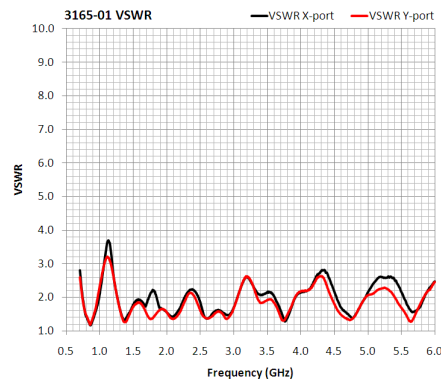
### Physical Specifications

MODEL	APERTURE HEIGHT	APERTURE WIDTH	LENGTH	WEIGHT
3165-01-MG	17.8 cm 7.0 in	17.8 cm 7.0 in	19.0 cm 7.5 in	1.3 kg 2.9 lbs
3165-01-SQ	35.5 cm 14.0 in	35.5 cm 14.0 in	36.3 cm 14.3 in	2.6 kg 5.8 lbs
3165-01-RD	35.5 cm 14.0 in	35.5 cm 14.0 in	36.3 cm 14.3 in	2.6 kg 5.8 lbs

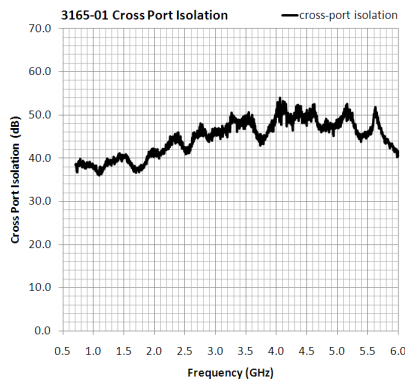
### Gain Typical Performance



### VSWR Typical Performance



### Cross Polarization Isolation Typical Performance



### Reflectivity Typical Performance

