ETS•LINDGREN
An ESCO Technologies Company

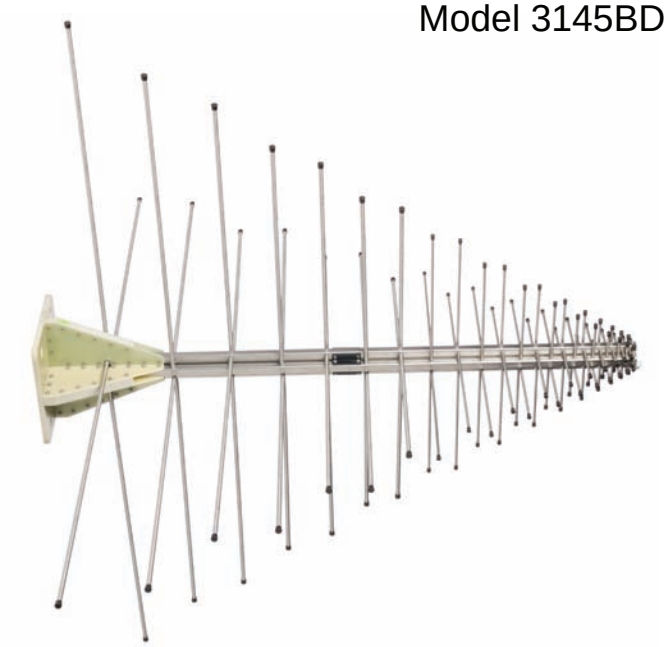
Antennas

Dual-Polarized Log-Periodic Dipole Array

Model 3145BDP

FEATURES:

- **100 MHz - 1.1 GHz Frequency Range**
- **1.5:1 VSWR Average**
- **800 W Max. Continuous Input**
- **Stainless Steel Construction**
- **Dual Linearly Polarized**
- **Individually Calibrated**



ETS-Lindgren's Model 3145BDP Dual-Polarized Array

ETS-LINDGREN'S Model 3145BDP Dual-Polarized Log-Periodic Array is a dual linearly polarized, broadband antenna designed to operate over the frequency range of 100 MHz to 1.1 GHz.

The choice of scaling factors, the various diameters of each element, and the center-to-center spacing of the booms result in excellent VSWR characteristics throughout the operating frequency range.

The precise design of the feed and positioning of the elements on the boom yields optimum phase relationship. This causes the active region, at any given frequency, to propagate RF energy towards the smaller elements, leaving the elements behind it inactive and operating as reflectors to improve the gain. The constant gain of the antenna yields an antenna factor which varies linearly with frequency. The variation is smooth; therefore, accurate interpolation of performance between specified frequency points is simple.

FEATURES

The Model 3145BDP frequency range of 100 MHz - 1.1 GHz makes it ideal for spectrum monitoring over a wide band. Its stainless steel construction allows for operation outdoors for prolonged periods of time.

The 3145BDP can also be used for antenna pattern measurement, including outdoor ranges.

Manufactured of rugged stainless steel, the Model 3145BDP is designed for prolonged outdoor use and harsh operating environments. For indoor use, a custom-designed aluminum antenna is also available.

Calibrated at 10 m per ANSI C63.5, the Model 3145BDP has actual Antenna Factors and a signed Certificate of Conformance included with the antenna.

STANDARD CONFIGURATION

- Antenna Including Mounting Flange
- Individually Calibrated at 10 m per ANSI C63.5-1988. Actual antenna factors gain uncertainty values and a signed Certificate of Calibration Conformance included in manual.

OPTIONS

- Custom indoor configuration featuring aluminum construction.

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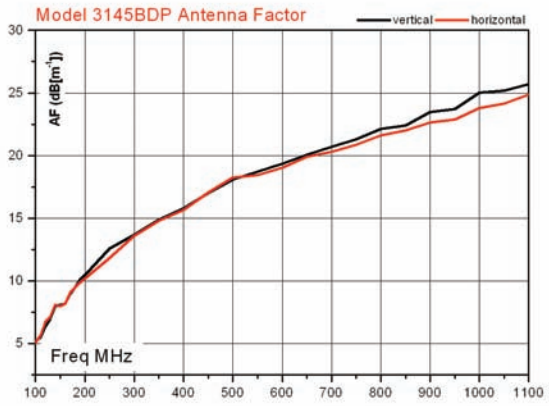
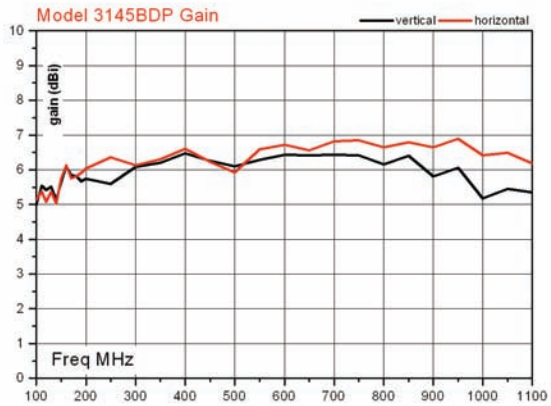
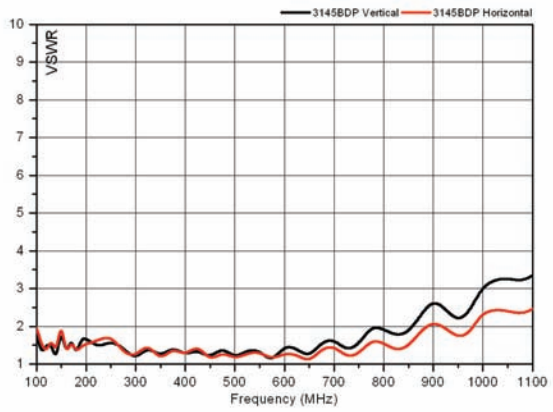


Model 3145BDP Typical Antenna Factor



Model 3145BDP Typical Antenna Gain



Model 3145BDP Typical VSWR

Electrical Specifications

MODEL #	FREQUENCY RANGE	INPUT IMPEDANCE	VSWR	MAXIMUM RF INPUT POWER	RF CONNECTOR
3145BDP	100 MHz - 1.1 GHz	50 Ω	1.5:1 average, 3.5:1 maximum	800 W	(2) Female N Type Connectors

Physical Specifications

MODEL #	HEIGHT (OVERALL)	WIDTH (OVERALL)	WEIGHT
3145BDP	1.33 m 4.35 ft.	1.62 m 5.32 ft.	18.20 kg 40.14 lb.

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Information presented is subject to change as product enhancements are made. Contact ETS-Lindgren Sales Department for current specifications.

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