## 3145BDP DUAL-POLARIZED LOG-PERIODIC DIPOLE 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.



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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.

## **Key Features**

- 100 MHz to 1.1 GHz Frequency Range
- 1.5:1 VSWR
- Average 800 W Maximum Continuous Input
- Stainless Steel Construction Dual
- Linearly Polarized

#### **Features**

# Frequency Range Ideal for Spectrum Monitoring

The model 3145BDP frequency range of 100 MHz to 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.

#### Solid Construction

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.

# Specifications

## **Electrical Specifications**

Frequency Maximum: 1.1 GHz Frequency Minimum: 100 MHz

Input Impedance:  $50 \Omega$ 

VSWR: 1.5:1 Average; 3.5:1 Maximum Maximum RF Input Power: 800 W

Pattern Type: Directional

Polarization: Linear

## **Physical Specifications**

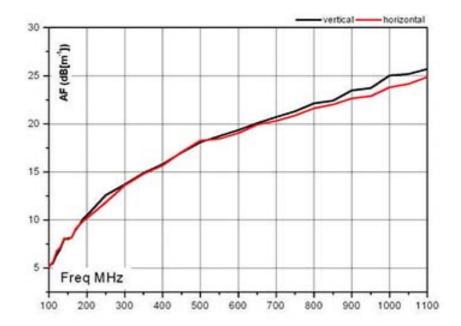
Height: 1.33 m (4.36 ft) Width: 1.62 m (5.31 ft)

## **Other Specifications**

- 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.
- Manual



3145BDP Dual-Polarized Log-Periodic Dipole Array Antenna Factor



3145BDP Dual-Polarized Log-Periodic Dipole Array Gain

