

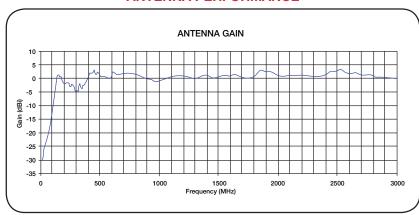
# **Broadband Intercept Antenna**





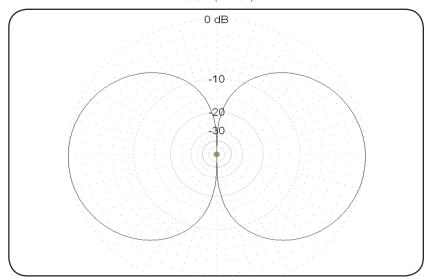
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## **ANTENNA PERFORMANCE**



## **ELEVATION GAIN PATTERN**

1.5 GHz (3.41 dBi)



L-3's Broadband Intercept Antenna (BIA-3) is a high-performance antenna that incorporates advanced design and manufacturing technologies. The basic design is a standard broadband cone configuration, with a carefully engineered feed-point to provide very flat response over three octaves. In addition, the manufacturing and assembly of these antennas has been simplified greatly to minimize product lead times. As an option, the whip antenna may be removed for operation above 500 MHz.

### **FEATURES**

- Frequency range of 20 to 3000 MHz
- Single output from built-in diplexer
- Very lightweight and portable
- Weather-resistant for continuous outdoor operation
- N-type connector
- Rugged design
- Fixed-mount (standard) or magneticmount (option)

### **PRODUCT FAMILY MATRIX**

The features of the different models within the BIA series of broadband intercept antennas is summarized in the table below:

	BIA-1	BIA-2	BIA-3	BIA-4	BIA-5	BIA-6
SINGLE OUTPUT			Х	Х	Х	
DUAL OUTPUT	х	х				х
LOW-NOISE PREAMP				Х		
PROTECTION CKTS				Х	х	х
RX OR TX CAPABLE	х	х	Х			
RX ONLY CAPABLE				Х	х	Х

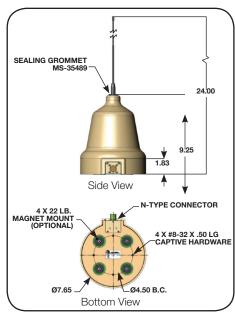


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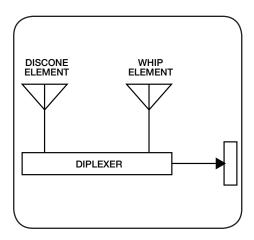
SPECIFICATIONS	
Frequency	20 to 3000 MHz
Impedance	50 ohms
Applications	Receive or transmit
Max TX input power	+21 dBm 20 to 600 MHz +24 dBm 600 to 1400 MHz +37 dBm 1400 to 3000 MHz
Typical antenna gain	0 dBi, 400 to 3000 MHz -2 dBi, 150 to 400 MHz -12 dBi, 100 MHz -23 dBi, 50 MHz -30 dBi, 20 MHz (-30 dBi nominal @ 20 MHz)
Size	diameter 7.5 in., height 9.5 in., diameter 7.5 in., height 24.5 in. (with whip antenna)
Weight	4 lb.
Operating temperature	-40 °C to +75 °C
Storage temperature	-55 °C to +85 °C
Environmental (designed to meet)	Humidity: 5% to 95% non-condensing Altitude: < 15,000 ft. MSL Shock (11mS, 1/2 sine): 2.5 g op, 10 g non-op Vibration (5 to 500 Hz random): 2 g RMS EMI/RFI (MIL-STD-461E): CE102, CE106, CS101, CS103, CS114, CS115, CS116, RE102 and RS103

#### **MECHANICAL DATA**

All dimensions shown are in inches.



## **BLOCK DIAGRAM**



All equipment is warranted for a period of one year from date of delivery. The standard terms and conditions of the warranty are available for review upon request. Additional warranty coverage is also available at the time of sale. Please ask your sales representative for more information.

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