



### 2400 TO 2483 MHz ECHO SERIES® ANTENNA

The Echo Series® antenna system offered by Laird Technologies is constructed of aluminum alloy with a powder-coat painted finish. They come standard with an integral N Female connector and heavy duty U-bolt bracket. A cone mount bracket is also available for surface installations. The Echo Series® antenna can be used in a wide variety of wireless systems. Its superior front to back performance minimizes external interference coming from behind the unit which makes it desirable for high density antenna installations or installations where the installer wants to minimize interference.

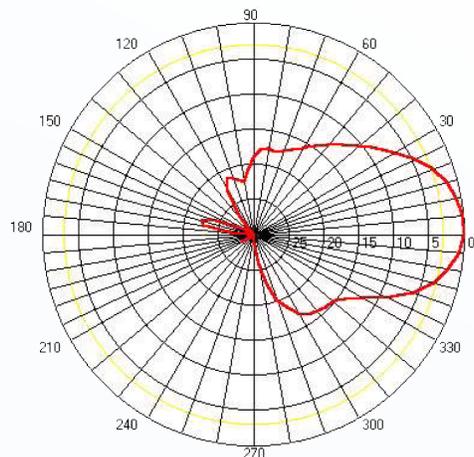
#### FEATURES

- 14 dBi antenna gain
- Aesthetic design for high-end CPE installations
- Pole mount or surface mount
- Full tilt and rotation adjustments
- Vertical or horizontal polarization
- Type N female connector
- Optimized for 2.4 GHz ISM band
- Rugged, lightweight, and waterproof

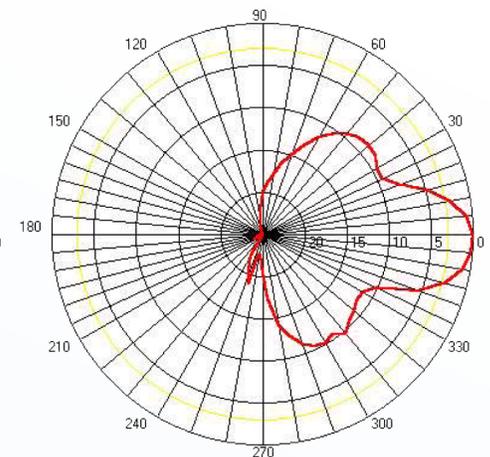
#### MARKETS

- 2.4 GHz ISM band applications
- Wireless internet access
- Point-to-multi-point systems
- Wireless networks
- Wireless broadband systems
- Building to building high speed links
- WiMAX

#### ANTENNA PATTERNS



ES24-14 E-Plane at 2.4 GHz



ES24-14 H-Plane at 2.4 GHz

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### SPECIFICATIONS

PARAMETER	
Frequency range	2400-2483 MHz
Input return loss (S11)	-14 dB
VSWR	1.5:1
Impedance	50 ohm
Input power	50 watts
Pole diameter (OD)	1 to 2 in (25 to 51 mm)
Operating temperature	-45° to +70°C
Gain	14 dB
3dB beam angle	26°
Front to back	> 30 dB
Rated wind velocity	125 mph
Weight	3 lbs (1.2 kg)
Dimension (diameter)	10.24 in (260 mm)

### WIND LOADING (LBS.)

MODEL	100 MPH	125 MPH	100 MPH WITH ½ IN RADIAL ICE
ES24-14	22 lbs	34.4 lbs	23 lbs

### SYSTEM ORDERING

- ES24-14 14 dB Echo Series antenna with pole mount  
 ES-CM Optional cone mount for surface mount applications (sold separately)



ANT-DS-ES24-14 0611

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