

The ANT-MD24-12 2.4GHz Mini Directional antenna is a sub-compact antenna for the most demanding client applications. The antenna offers high gain in an ultra-small aesthetically pleasing package. The antenna is constructed of gray color UV ABS plastic with aluminum backplate and stainless steel mounting bracket. The antenna can be used in Horizontal or Vertical Polarization by making a change to the mounting bracket. The stainless steel bracket affords +/- 15 deg. tilt adjustment. The compact low visual impact attractive styling blends well in almost any application. The antenna comes with an integral N Female connector standard.

## 702-W / 702M12-W APPLICATIONS

- Wireless LAN applications
- Client antennas
- 802.11b/g applications



## SPECIFICATIONS

Frequency Range:	2400 - 2483 MHz
Gain:	12 dBi
Horizontal Beam width:	65 deg.
Vertical Beam width:	34 deg.
Front to Back:	25 dB
VSWR:	1.5:1
Impedance:	50 ohms
Input Power:	100 Watts
Operating Temperature:	-40° to 70° C
Pole Size (diameter):	1 to 1.66 inches
Weight:	0.85 lbs. (0.383kg)
Dimensions:	4" x 4" x 4"
	102 x 102 x 102 (mm)
Bracket Tilt:	15 deg.

## Range Estimates\*

Throughput	26Mbps	100Mbps
Distance (Miles)	4.37	.82
Distance (kilometers)	7.04	1.32
TX Power	20dBm	15dBm
Receive Sensitivity	-88dBm	-77dBm
Number of Spatial Streams	1	2

\*Given the following parameters:

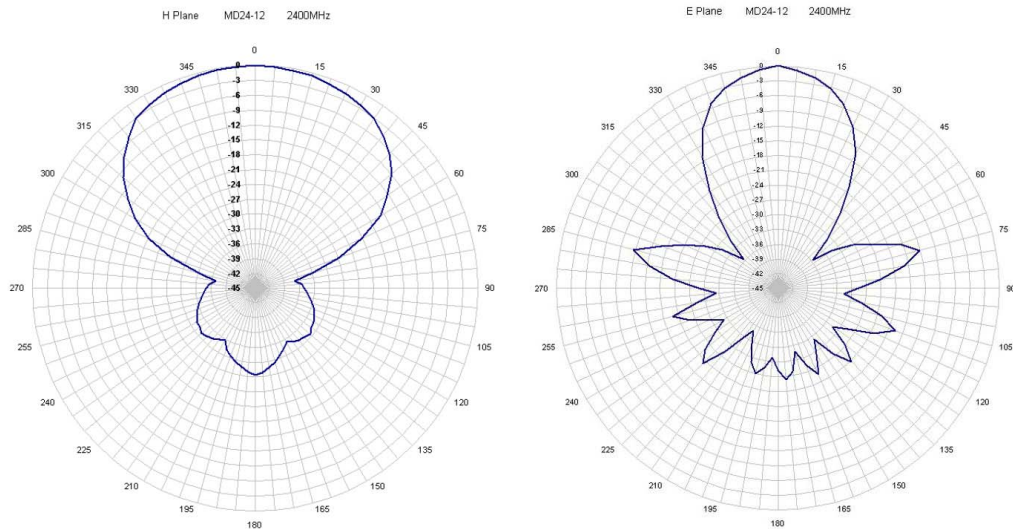
- Free Space loss / 2-ray ground reflection models
- Antenna is used with an N-Tron 702-W or 702M12-W Ethernet Radio mounted at base level.
- Antenna height: 25ft (7.6 meters) above ground
- Clear line of sight between antennas with no obstructions of the first Fresnel Zone
- 25 feet of N-Tron ANT-CAB-400 series antenna cable for antenna to Radio connection
- 20MHz wide signal
- Center frequency = 2.45GHz
- 10dB loss assumed for weather conditions

Range estimates are theoretical. Actual results may vary based on installation conditions. A site survey should be performed as part of the planning process to determine the presence of RF interference and identify optimum installation locations for access points and antennas.

#### N-Tron ANT-MD24-12 Ordering Information

<b>ANT-MD24-12</b>	Mini Directional Antenna
<b>ANT-CAB-400-N-RPSMA-X</b>	Low Loss Coaxial Antenna cable; 1 RP-SMA and 1 N-Male connector for use with 702-W
<b>ANT-CAB-400-N-RPTNC-X</b>	Low Loss Coaxial Antenna cable 1 RP-TNC and 1 N-Male connector for use with 702M12-W
<b>ANT-CAB-195-RPSMA-RPSMA-X</b>	702-W Antenna Bulkhead extension cable set; Each cable includes (1) Straight RP-SMA Bulkhead Jack and (1) 90° RP-SMA plug (package of 3). For use when mounting a 702-W in an enclosure.
<b>ANT-LA6-NFF</b>	2-6GHz quarter wave lightning arrestor (N-Female to N-Female, less than 0.2dB insertion loss, IP65, -40 to 85°C)
<b>ANT-CAB-400-N-X</b>	Low loss CA-400 coaxial cable with (2) N-Male connectors (for use with the ANT-LA6-NFF lightning arrestor)

#### Antenna Patterns



N-TRON USA & Corporate Headquarters  
 3101 International Blvd. Building 6  
 Mobile, AL 36606 • USA  
 Phone +1-251-342-2164  
 Fax +1-251-342-6353  
[www.n-tron.com](http://www.n-tron.com)

please visit us worldwide at [www.n-tron.com](http://www.n-tron.com)