

# ANT-PAD24-16 Antenna

N-Tron Networking Series



## ▶▶▶ Flat Panel Directional Antenna

The *ANT-PAD24-16*, a 2.4 GHz flat panel directional antenna, offers high gain in a thin low profile package. The antenna is constructed of gray UV resistant ABS plastic radome with an aluminum backplate. The antenna can be used in horizontal or vertical polarization. The die cast aluminum or galvanized steel bracket affords +/- 45 deg. up or down tilt adjustment and the stainless steel hardware assures a long service life. The *ANT-PAD24-16* antenna can be surface mounted or pole mounted and 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:	16 dBi
3dB Beam width (H&V):	26 deg.
Front to Back:	27 dB
Cross Polarization:	-20 dB
VSWR:	1.5:1 typical
Impedance:	50 ohms
Input Power:	100 Watts
Operating Temperature:	-40° to 70° C
Pole Size (diameter):	1 to 2 inches
Weight:	1.97 lbs. (0.9kg)
Dimensions (Diameter x Depth):	11" x 11" x 0.8" 279mm x 279mm x 21mm
Bracket Tilt:	45 deg.
Wind Load:	
Square Inches:	121
100 mph:	30 lbs.
125 mph:	47 lbs.
100 mph with 1/2"radial ice:	32 lbs.



### Range Estimates

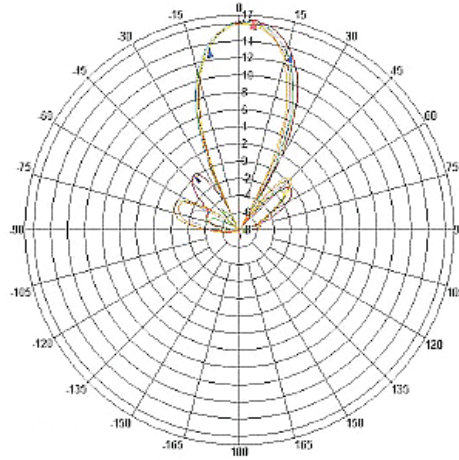
Throughput	26Mbps	100Mbps
Distance (Miles)	6.9	2.05
Distance (kilometers)	11.15	3.31
TX Power	20dBm	15dBm
Receive Sensitivity	-88dBm	-77dBm
Number of Spatial Streams	1	2

\*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 antenna installation locations for access points and antennas.

### Horizontal and Vertical Antenna Patterns



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