1151-2N

#### COMMANDER Omni Fiberglass Antenna, 440-450, 10.1dBi, N Female

Please visit us on the internet at <u>http://www.commandertech.com</u>

### **Product Description**

These fiberglass enclosed antennas offer significant advantages over most exposed element arrays and deliver equal or better electrical performance. Commander Omni Antennas employ multiple, large diameter copper radiating elements stacked collinerly, fed in phase and enclosed in a weather-proof fiberglass housing. These DC grounded units use low loss Teflon and insulated connectors. The antenna provides 8.0 dBd gain and a full 10 MHz bandwidth. The antenna also provides 7.5 dBd omnidirectional gain and can withstand winds of 125 mph (200 km/hr). It is excellent for duplex systems with 8 MHz or less separation between Tx and Rx frequencies. Several mounting hardware options are available for these antennas.

1151 Series

Commander

TECHNOLOGIES

#### **Features/Benefits**

Weatherproof design assures system reliability, withstands winds of 125 mph. Copper elements minimize possibility of of intermod generation. DC grounded - protects against damage from lightning strikes.

| Technical Specifications                                    |   |  |
|---|---|--|
| Frequency Band  | 300-699.9 MHz                           |  |
| Horizontal Pattern  | Omni Directional                        |  |
| Antenna Type  | Fiberglass Omni                         |  |
| Electrical Down Tilt Option                                 | Fixed                                   |  |
| Gain, dBi (dBd)   | 10.1 (8)                                |  |
| Frequency Range, MHz  | 440-450                                 |  |
| Connector Type  | N Female                                |  |
| Connector Location  | Bottom                                  |  |
| Mounting Type   | Fixed                                   |  |
| Electrical Down Tilt, deg                                   | 0                                       |  |
| Orientation   | Upright                                 |  |
| Mounting Hardware   | 46 Clamp Set                            |  |
| Rated Wind Speed, km/h (mph)                                | 200 (125)                               |  |
| Gain (Omni), dBi (dBd)                                      | 10.14 (8)                               |  |
| VSWR  | < 1.5 : 1                               |  |
| Vertical Beamwidth, deg                                     | 12                                      |  |
| Polarization  | Vertical                                |  |
| Maximum Power Input, W                                      | 250                                     |  |
| Lightning Protection  | Direct Ground                           |  |
| 3rd Order IMP @ 2 x 43 dBm, dBc                             | -130                                    |  |
| Impedance, Ohms   | 50                                      |  |
| Overall Length, m (ft)                                      | 4.72 (15.5)                             |  |
| Element Housing Length, m (ft)                              | 4.11 (13.5)                             |  |
| Mounting Pipe Diameter, m (in)                              | 0.07 (2.75)                             |  |
| Support Pipe Length, m (ft)                                 | 0.61 (2)                                |  |
| Weight, kg (lb)   | 8 (17)                                  |  |
| Radiating Element Material                                  | Copper                                  |  |
| Element Housing Material                                    | Fiberglass                              |  |
| Support Pipe Material                                       | Aluminum Alloy                          |  |
| Max Wind Loading Area m <sup>2</sup> (ft <sup>2</sup> )     | 0.16 (1.72)                             |  |
| Bend Mom @ Rated Wind 1" Below Top of Mt Pipe, N m (ft lbf) | 637 (470)                               |  |
| Wind Load - Side @ Rated Wind, N (lbf)                      | 307 (69)                                |  |
| Shipping Weight, kg (lb)                                    | 21.8 (48)                               |  |
| Packing Dimensions, HxWxD mm (in)                           | 5270 x 100 x 100 (207.47 x 3.94 x 3.94) |  |
| Packing Dimensions, HxWxD, m (ft)                           | 5.27 x 0.1 x 0.1 (17.3 x 0.33 x 0.33)   |  |
| Shipping Dimensions of Accessory, HxWxD, m (ft)             | Packed with Antenna                     |  |
| Shipping Mode   | Common Carrier                          |  |
| Notes   |   |  |

COMMANDER Model 1151-2N

REV: 1.0

Print Date:

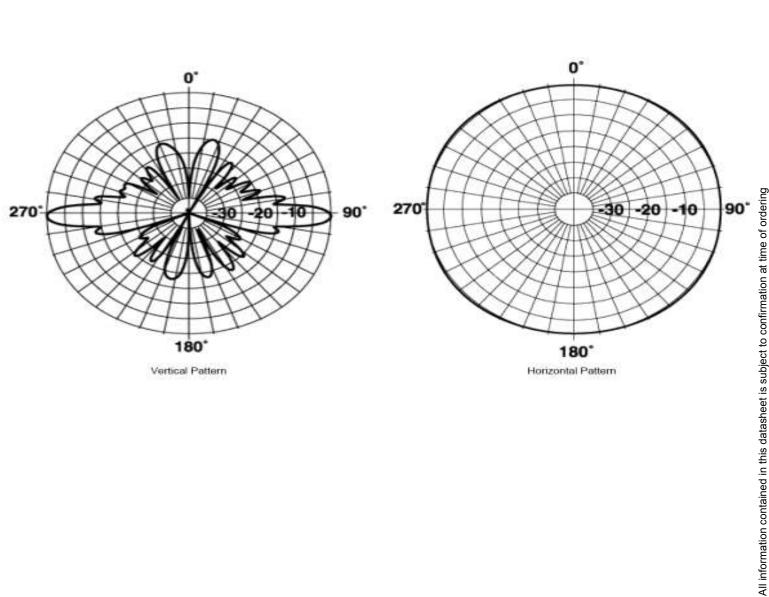
1/6/2012

1151-2N

# COMMANDER Omni Fiberglass Antenna, 440-450, 10.1dBi, N Female

Please visit us on the internet at http://www.commandertech.com

## **Other Documentation**



COMMANDER

TECHNOLOGIES

| COMMANDER Model 1151-2N | REV: 1.0 | Print Date: | 1/6/2012 |
|-------------------------|----------|-------------|----------|