

### assured communications°

## RF-7800W-AT012

RAPIDLY DEPLOYABLE, RUGGEDIZED TWO-FOOT PANEL ANTENNA (4.4-5.0 GHz)

> The RF-7800W-AT012 is a transportable two-foot panel antenna suited for rapid deployment and ease of use. The mounting studs allow for the bracket to mount the RF-7800W radio perpendicular to the antenna, reducing the antenna and radio profile (reducing wind loading) and minimizing the RF cable length. The antenna covers the NATO Band IV frequency range (4.4 to 5 GHz) which includes the public safety band.

With a rubber armor perimeter, bracing and high-impact construction, the RF-7800W-AT012 is uniquely designed for harsh environments, making it ideal for nomadic and fixed-ground stations.

The RF-7800W-AT012 can easily be mounted for horizontal or vertical polarization. This capability allows for collocation of multiple radios while minimizing interference.

The RF-7800W-AT012 is supplied with a compression clamp assembly that can be used with most tubular masts. Installation takes only a few minutes using standard hand tools. The clamp assembly allows for quick elevation and azimuth adjustment.

With its exceptional gain, the RF-7800W-AT012 is the right antenna choice for medium-to-long range point-to-point line-of-sight radio links.

Mast and radio not included.

# Specifications for the RF-7800W-AT012

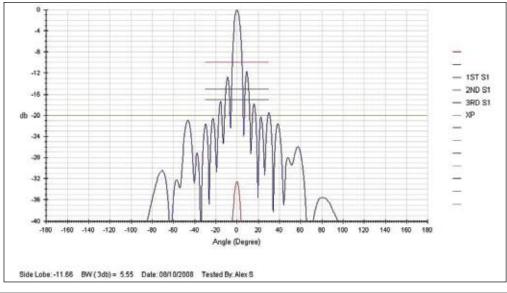
	Electrical
Frequency Range	4.4-5.0 GHz
Gain	27 dB (nominal)
Impedance	50 ohm (nominal)
Polarization	Linear (Vertical or Horizontal)
VSWR	1.5:1 (typical)
Radiation Pattern	Azimuth: 6° beam Elevation: 6° beam
Front to Back	> 40 dB
Environmental	
Temperature	-40° to +60°C
<b>Relative Humidity</b>	90% non-condensing at 50°C
Wind	137 MPH (220 KPH)

Mechanical		
Dimensions	25 L x 25 H x 3 D in.	
Antenna Mount	Bracket mount	
Antenna Weight	12.6 lbs. (5.7 kg)	
Color	FED-STD-595B Green with Black rubber armor	
RF Connector	Type N Female	
Features		
Ruggedized		
High gain		
Rotate 90° for horizontal polarization		
Easy to deploy		

#### D. -4 - Max=-4.96 dbi -8 - Max= 27.39 dbi -12 1ST S1 2ND S1 -18 - 3RD S1 db -20 SP -24 -20 -32 -36 100 -100 -150 -140 -120 -100 -20 20 60 100 120 140 160 -00 -60 -40 0 40 60 Angle (Degree) Side Lobe: -11.24 BW (3db) = 5.5 Date: 08/10/2008 Tested By: Alex S

# **Azimuth Radiation Pattern at 4.6 GHz**

## **Elevation Radiation Pattern at 4.6 GHz**





RF Communications | 1680 University Avenue | Rochester, NY USA 14610 www.harris.com 585-244-5830