

#### assured communications°

# RF-7800W-AA001

CLOSED LOOP ANTENNA ALIGNMENT SYSTEM

> Designed for the RF-7800W-0U440 Broadband Ethernet Radio

Quick and automatic antenna alignment The RF-7800W-AA001 is a Closed Loop Antenna Alignment System (CLAAS) designed specifically to work with the RF-7800W-OU440 Broadband Ethernet Radio (BER). The CLAAS gets immediate signal strength feedback from the radio to aim the attached antenna. The CLAAS can be used in a radio point-to-point or point-to-multipoint mode.

The RF-7800W-AA001 can scan +/- 180 degrees in azimuth and +/- 20 degrees in elevation. When limited to scanning +/- 90 degrees azimuth, the CLAAS can complete antenna aiming in less than one minute. Control for the CLAAS can be from anywhere on its attached network via web-based interface.

The CLAAS can be used with any of five different RF-7800W series antennas to meet all line-of-sight distance requirements. The unit is rugged yet lightweight and can be used with fixed or portable masts. The system can be installed without tools.

The CLAAS consists of a Servo Unit and Power Control Unit. The Power Control Unit can be operated from an AC or DC power source, and powers both the Servo Unit and a Broadband Ethernet Radio. All necessary connecting cables are provided with the unit.

The RF-7800W-AA001 CLAAS provides quick and automatic antenna alignment when using the RF-7800W-OU440 Broadband Ethernet Radio.

## Specifications for the RF-7800W-AA001

Electrical	
Azimuth Range	+/- 180 degrees
Elevation Range	+/- 20 degrees
Aiming Time	Less than 1 minute for +/- 90 degree azimuth only
User Interface	Web-based Graphical User Interface or Command Line
Power Requirements	90–265 VAC, 47–63 Hz, or 10.5 –34.5 VDC, 200 watts max.

Environmental	
Temperature	-33° to +55°C (operational), -40° to +70° C (storage)
Ingress Protection	IP66
Humidity	0-100 %
Vibration/Shock	Per MIL-STD-810F

#### Mounting

The Servo Unit mounts to tubular masts with a diameter of 1.5-4.5 in.

The supplied antenna brackets can be used with the following antennas: RF-7800W-AT001, RF-7800W-AT002, RF-7800W-AT003, RF-7800W-AT0012, and RF-7800W-AT0013

Mechanical		
Size	9.12 H x 9.37 W x 5.24 D in. (23.2 x 23.8 x 13.3 cm) Servo Unit. 5.4 H x 7.5 W x 13.6 D in. (13.7 x 19.1 x 34.5 cm) Power Control Unit	
Weight	Less than 25 lbs. (11.3 kg), Servo Unit with radio/antenna mounting brackets Less than 15 lbs. (6.8 kg), Power Control Unit	
Supp	lied Accessories	
30-meter Power/	Control Cable (12069-0068-A100)	
30-meter Power/ Operato	Control Cable (12069-0068-A100) r and Installation Manuals	
30-meter Power/ Operato US, UK and Euro AC Pow 000	Control Cable (12069-0068-A100) r and Installation Manuals er Cables (10181-9809-009), (10081-9814- 9). (10081-9831-009)	
30-meter Power/ Operato US, UK and Euro AC Pow 009 DC Power	Control Cable (12069-0068-A100) r and Installation Manuals er Cables (10181-9809-009), (10081-9814- 9). (10081-9831-009) r Cable (12069-1032-A015)	
30-meter Power/ Operato US, UK and Euro AC Pow 009 DC Power	Control Cable (12069-0068-A100) r and Installation Manuals er Cables (10181-9809-009), (10081-9814- 9). (10081-9831-009) r Cable (12069-1032-A015)	
30-meter Power/ Operato US, UK and Euro AC Pow 009 DC Power	Control Cable (12069-0068-A100) r and Installation Manuals er Cables (10181-9809-009), (10081-9814- 9). (10081-9831-009) r Cable (12069-1032-A015) <b>Demal Accessories</b>	

21-meter Mast (12069-7006-02)

### User Interface Screens





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

Specifications subject to change without notice. Copyright © 2009 Harris Corporation 2/09 DS-453