

RF-7800W-TK001

Antenna Tracking System (ATS)

GENERAL	
Mounting	The GPS Heading Unit (GHU) and Servo motor mounts to masts with a diameter of 1.5 to 4.5 inches
Weight	The sum of the weights of the ATS deployed at the top of a mast is less than 40 lbs including radio antenna and power amplifier
Range	The 12069-0301 Servo unit has a pan range of 360° and elevation ranges of -20° to +90°, relative to the mounting platform

OPERATIONAL MODES	
Signal Strength Alignment	System utilizes direct radio link quality information and a predictive algorithm to continuously optimize the data link as the target object moves
GPS Target Alignment	System utilizes GPS-based position reports from the target to continuously align the data link

ELECTRICAL	
AC Input Voltage Range	90 – 265 volts at 47 – 63 Hz
DC Input Voltage	10.5 – 34.5 volts 200 W max

ENVIRONMENTAL	
Temperature Range	Operating: -22°F to 131°F (-30°C to +55°C) Storage: -40°F to 158°F (-40°C to +70°C)
Dust/Sand Protection	Per Ingress Protection IP66
Wind/Rain/Fog Protection	Per Ingress Protection IP66
Relative Humidity	95% non-condensing relative humidity

ACCESSORIES	
INCLUDED	
12069-0062-01	Rugged Power/Control Unit
12069-0301-01	Servo Unit
12069-0310-01	GPS Heading Unit
Associated Brackets	Cables and hardware
OPTIONAL	
12069-7005-02	15-meter telescopic mast
RF-5945-TM180	18-meter telescopic mast
12069-7006-02	21-meter telescopic mast
12069-0500-01	GPS Transponder 480 Mhz
RF-7800W-PA440	Power amplifier



The L3Harris RF-7800-TK001 employs high-gain directional antennas to deliver high-bandwidth data throughput and range extension for maritime, airborne and land-based mobile operations. The system, coupled with the Harris Falcon III® RF-7800W High-Capacity Line-Of-Sight (HCLOS) Multimission Radio, provides secure and robust data links in challenging applications not possible with similar tactical products. Engineered for rapid, flexible deployment, the ATS is ruggedized for top performance in extreme environments. Data link strength is continuously optimized through signal strength and GPS alignment technologies.

