RF-6750W

WIRELESS GATEWAY

STANAG 5066
STANAG 4538

Automatically sends

email messages over radio

links and LANs using

STANAG 5066 and

STANAG 4538

The RF-6750W Wireless Gateway software package connects to an Ethernet-TCP/IP local area network and operates as a "radio" mail server. It provides transparent delivery of email and files across multiple-transmission media, including HF/VHF/UHF radio, LANs, landline, microwave, or satellite and is compatible with email packages that run on a variety of platforms. The software integrates Harris-developed robust data transmission techniques with Commercial-Off-the-Shelf software for fast and reliable information transfer.

When installed on a Harris- or customer-provided PC, the RF-6750W forms a multi-media messaging system for transparent relay of email and files over media that are prone to errors. It also automatically relays messages if the first route is blocked.

For HF use, the software allows one of three protocols/waveforms to be used on the air. STANAG 5066 is the second-generation NATO interoperability standard. Use of this standard allows for compatibility with the HF Global Communications System (HFGCS), which manages the U.S. Air Force SCOPE Command Program. STANAG 4538 is the third-generation interoperability standard, and FED-STD-1052 is used for interoperability with legacy Harris wireless products.

Messages are generated and received by terminals that are connected to the LAN, WAN, or in remote locations not easily accessed by communication lines. The sender sends a normal email message or data, and the RF-6750W automatically routes the message over the proper radio or landline link and sends it to the final destination, adaptively selecting the best available channel.

Harris' wireless email solutions include a Windows®-based STANAG 5066 IP Client, the first of its kind in the industry. The ground-breaking IP Client is integrated with the RF-6750W and provides the ability to transfer IP data using radios that do not support IP natively.

The Wireless Gateway also includes Harris Imager, which has many of the capabilities of the industry-standard Harris Universal Imaging Transmission Software (HUITS). It manipulates images directly from the application and enables transmission of high resolution digital images using the wireless email system. Harris Imager, which also translates between files in several formats, includes wavelet compression that provides superior compression to JPEG.

Specifications for the RF-6750W

Features

Seamlessly transmits email over HF/VHF/UHF radio, LAN, microwave, satellite, or landline media
Supports STANAG 5066 and STANAG 4538 protocols
STANAG 5066 IP Client enables IP communications using non-IP equipped radios
Accommodates variety of cryptographic devices for enhanced security, including embedded and external cryptos
Fully automated setup and tear-down of Automatic Link Establishment (ALE) links

General

Encryption	In-line encryption using KG-84A,KG-84C, KY- 99, KY-57, KIV-7, KY-58, KY-68, off-line, end-to-end (i.e. S/MIME, PGP), encryption embedded in radios
Logging/Archiving	Incoming and outgoing messages, radio and modem activities
Message Management	Automatic resend of messages over alternate paths and media, configurable transmission times, random retry period for message retry, message ganging to same location
Image Processing	Zoom, crop, rotate, color/brightness adjust, histogram equalization, image annotations, symbol overlays
Image Formats	Harris wavelet, JPEG, BMP, MAC, TIF, PNG

Minimum PC Requirements

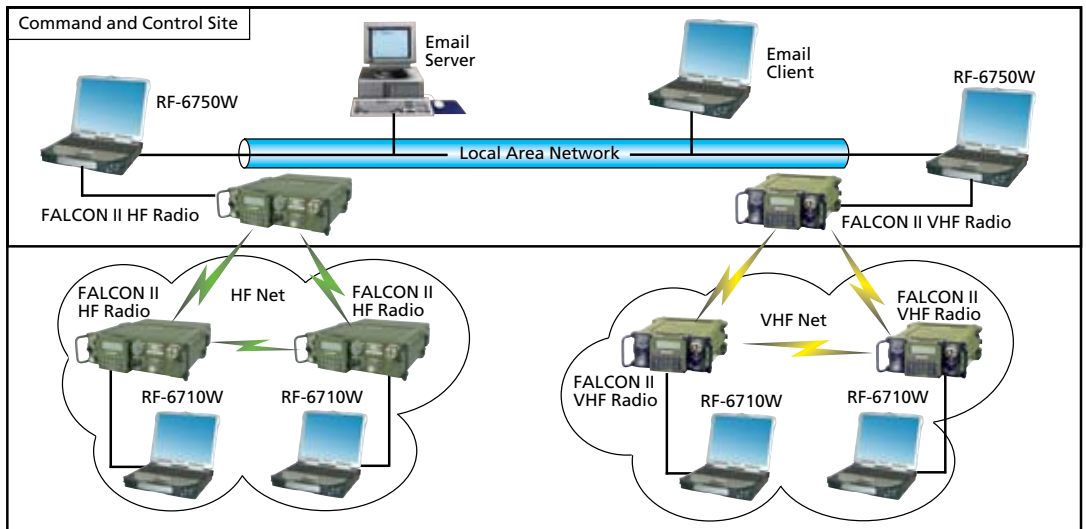|	
CPU	500 MHz for Windows 2000 1 GHz for Windows XP
RAM	256 MB for Windows 2000 512 MB for Windows XP
Hard Disk	80 GB
Operating System	Windows 2000 Professional (SP4) Windows XP Professional (SP2) Windows 2000 Server (SP3, SP4) Windows 2003 Server
Mail Server	Requires mail server on RF-6750W PC or on Local Area Network
Other	Asynchronous serial port (two ports with external modem) Ethernet adapter, PCI or PC card (PCMCIA) slot

Harris Equipment Interface

Radios	RF-5800H, AN/PRC-150C, RF-5800V, RF-5800V-HH, AN/PRC-117F, RF-5800M, RF-5800M-HH, AN/PRC-138, RF-3200E, RF-5022E, RF-5022, RF-7210 based
HF Modems	RF-5710, RF-5710A
Other Harris Equipment	RF-6010 Tactical Network Access Hub

Applicable Standards

Local Area Networking	TCP/IP
Automatic Link Establishment	MIL-STD-188-141B, STANAG 4538
HF Modem	MIL-STD-188-110B, MIL-STD-188-110A, STANAG 4539, STANAG 4538
HF Data Links	STANAG 5066, STANAG 4538 (if embedded in radio), FED-STD-1052
Mail Client/Server Interface	SMTP, POP3
Network Protocol	IPv4
Software Technology	ActiveX, COM, MFC

Ordering Information

RF-6760W-XXEN	CD Media
Where XX is	02 includes PCMCIA synchronous card 04 includes PCI synchronous card 03 for Asynchronous (RDP) radio interface (no synchronous card included)

Options

RF-3577	Series of personal computers

Sample Application