

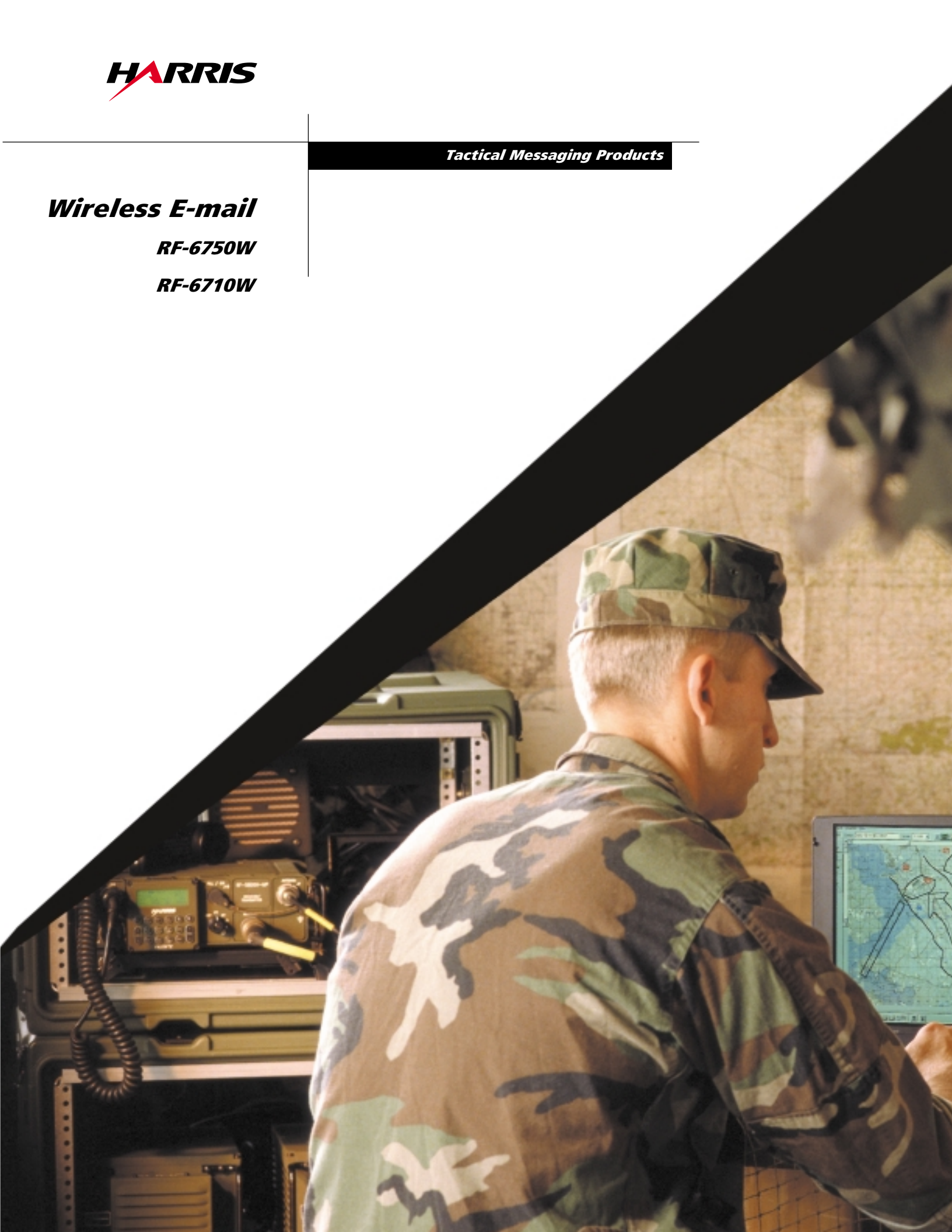


Tactical Messaging Products

Wireless E-mail

RF-6750W

RF-6710W





Cutting-Edge Performance. Unmatched Capability.



Harris email software runs on a wide variety of COTS PCs.



Data communications

Harris takes data communications seriously. With a long list of industry firsts in HF, VHF, and UHF data communications, Harris has consistently provided the highest performance tactical radio systems.

Wireless email

Harris is committed to providing the highest performance messaging systems in the industry. After ten years of lessons learned, Harris Wireless products provide efficient email messaging over stressed tactical radio channels. These software-based products can send and receive email, files, and images over HF, VHF, UHF, INMARSAT, microwave, and telephone.

Harris offers two Wireless products: the RF-6750W Wireless Gateway and the RF-6710W Wireless Message Terminal. The Wireless Gateway connects tactical radio links to a Local Area Network (LAN) or Wide Area Network (WAN). It connects the radio network to a wired network, including the Internet. Messages are automatically delivered from originator to destination, as if the network was completely hardwired. The RF-6710W has the same capabilities, less the LAN/WAN interface. It is usually used as the "field end," where the only communications link to the network is through the radio.

The RF-6710W and RF-6750W work on standard PCs running Microsoft® Windows operating systems, and consist of a Microsoft Windows installation disk, a manual, and if necessary, a PCI or PCMCIA synchronous communications card.

Networking

The Wireless products move email messages seamlessly over different media. Whether the data is email, file attachments, or images, the information is automatically routed to the destination through the appropriate communication channel. The message may be transported over HF, landline, INMARSAT, or other media.

In a stressed communications environment, the system can't rely on specific nodes to be operational. The Wireless products meet this challenge by automatically relaying messages over predefined alternate paths. If the secondary path is not viable, a third route is selected.

Security

The Wireless email products are designed for military and government communication. They accommodate a wide variety of government cryptographic devices ranging from embedded crypto to external, legacy crypto. Additionally, they can utilize COTS software-based data privacy that "plugs into" Microsoft® Outlook.

User Interfaces that work

The operator interface is Microsoft Outlook. It is simple, familiar, and easy to use. The Wireless Gateway and the Wireless Message Terminal installation software automatically installs Outlook and sets it up. Additional tools are provided for administration of the network including a network data base manager. When using Harris HF radios, the Wireless products integrate with the RF-6550H Radio Programming Applications (RPA). The RPA is a management system that allows a system administrator to set up a complete network, including radio frequencies, addressing, keys, and RF-6710W and RF-6750W addressing.

System Performance

For more than 20 years, Harris engineers have led the world in maximizing data throughput over narrowband radio channels, particularly HF. The wireless tactical environment is often bandwidth-limited. The highest system throughput is achieved by providing highly efficient mechanisms at *all* levels of the communication system.

In addition to superior modem technology, the Wireless products employ a suite of data-link protocols designed and perfected for stressed tactical channels. Whether it's STANAG 4538, STANAG 5066, or the High Performance Waveform (HPW), the Harris implementation provides fully adaptive data links that dynamically change the modem data rate to get the greatest possible throughput.

Additionally, the RF-6710W and RF-6750W employ a sophisticated message management function. Several capabilities provide significant improvements in throughput:

- Channel access
- Message compression
- Message conglomeration
- Automatic recall to busy stations
- Timed transmission
- Priority management

HUITS Mail

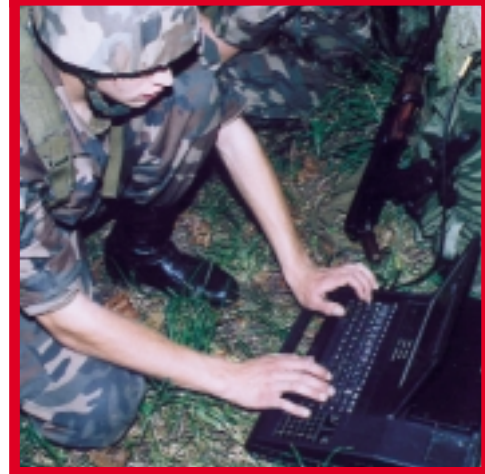
Harris was a pioneer in the late 1980s in the development of formats and protocols to send high-resolution images over tactical radio channels. The most recent tactical software package is the Harris Universal Image Transmission Software (HUITS). There are dozens of military and government organizations that have standardized on this software package to move their imagery from the field to analysis stations. This capability is now included with the Wireless products. An Outlook-based version allows the operator to capture images, manipulate them, compress them with a powerful wavelet compression engine, and send them as an email attachment. All with a few mouse clicks.

HF Interoperability

The Harris messaging solutions are focused on standards and interoperability. For HF, both second- and third-generation HF standards are supported with the RF-6710W and RF-6750W.

STANAG 5066 is the emerging NATO second-generation interoperability standard for email and network services over HF radio. It provides interoperability between different vendors implementations. The Harris RF-6710W and RF-6750W implementation features data rates as high as 19,200 bps (in ISB mode) and accommodates a variety of legacy crypto devices. It features fully adaptive data rates from 75 bps to 9600 bps using STANAG 4539 and MIL-STD-188-110B modems. MIL-STD-188-141A Automatic Link Establishment (ALE) is automatically controlled with Harris radios. The result is an interoperable, fully automated, auto-adapting system with performance second to none.

STANAG 4538 is the latest generation of ALE data transfer. It provides superior performance over stressed tactical channels. The STANAG 4538 data link utilizes code-combining techniques and black-side ARQ to deliver error-free data over poor channels. The ALE portion of STANAG 4538 is oriented toward large networks and provides faster and more robust linking. The RF-6710W and RF-6750W utilize these capabilities in Harris Falcon® II radios to deliver unparalleled system throughput for ground tactical users.





Proven design. Proven performance.



System flexibility

The Wireless products are built to accommodate a wide variety of systems requirements. Relaying, multiple communication media, timed transmission, prioritization, message conglomeration, and multiple on-air protocols have been implemented to provide versatile application of the system.

Unparalleled performance

Harris has been in the tactical radio messaging business since the 1980s and has continually reinvested in system improvements during that time. There are currently thousands of RF-6710W and RF-6750W products in service. The current products are built on the lessons learned from three previous generations. The tight integration with Harris modems and radios consistently demonstrates superior message throughput versus our competitors. Revolutionary and evolutionary improvements have resulted in robustness, stability, and performance found nowhere else in the industry.

The RF-6700 series has been in production for more than a decade. During this time, Harris has continuously incorporated new software, networking, and radio technology improvements into the product line. When considering our commitment to provide the best data systems in the business, it is clear that Harris is here to stay.



RF Communications

Government

Broadcast

Telecommunications



Communications solutions for today and beyond

Harris RF Communications Division is a leading supplier of secure voice and data communications products, systems, and networks to military, government, and commercial organizations worldwide.

Harris Corporation is an international communications equipment company focused on providing product, system, and service solutions for commercial and government customers. With more than 10,000 employees, including 4,000 engineers and scientists, Harris is a technology powerhouse. The Corporation has sales and service facilities in nearly 90 countries.



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