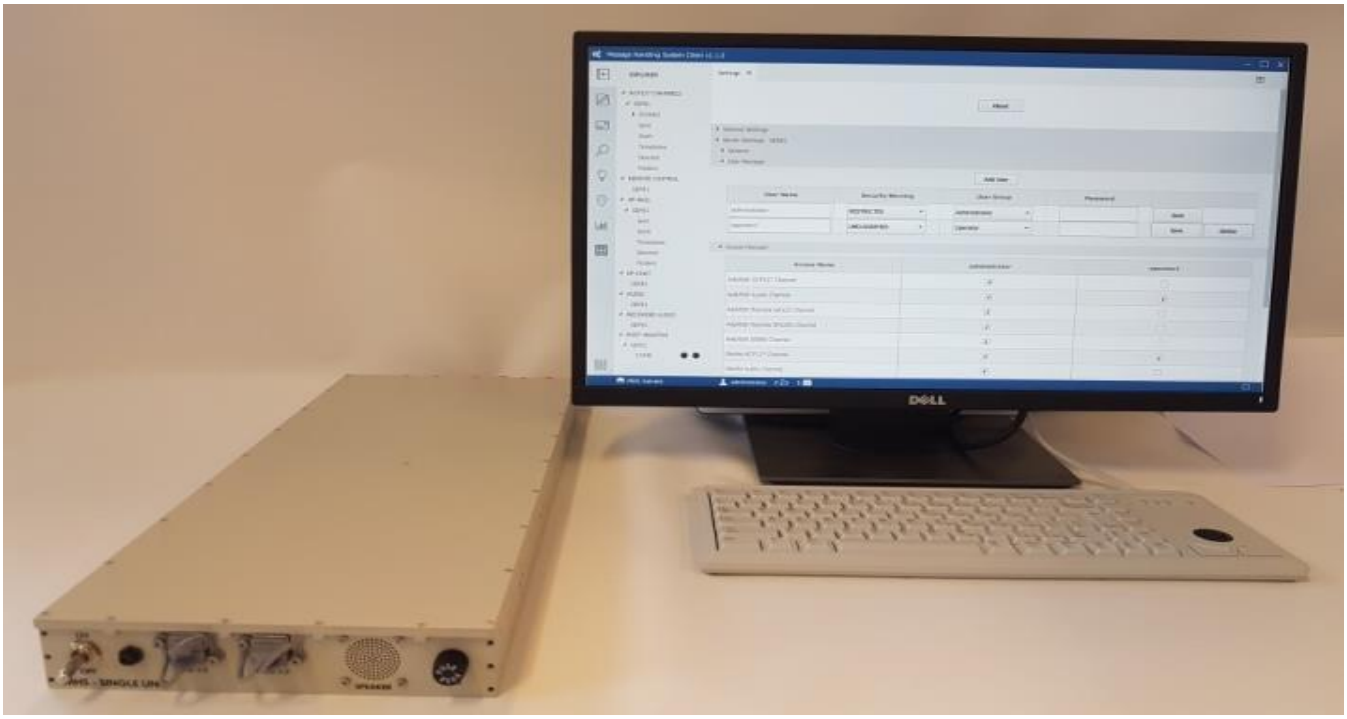
P/N : 767-1900/01.01

LEONARDO TURKEY

New Generation Message Handling System (MHS)

LEONARDO



OVERVIEW

LEONARDO TURKEY Message Handling System (MHS), in according with STANAG 5066, provides a durable and high-security data communication solution over HF Wireless Networks.

MHS supports ACP-127, STANAG 5066 HF E-Mail (SMTP), HF-Chat Application, COSS (Character Oriented Serial Stream), External Voice Communication, Internal Voice Communication and STANAG 4406 (Optional). One of the main features of the system is **the remote-control feature**.

MHS, is a complete solution that includes hardware and software components.

The system is basically available in two configurations

- **3U** height and compatible with 19" rack cabinet "**Redundant System**"
- Unlike Redundant System, "**Single System**" consisting of a more compact structure and non-redundant hardware and software solution

SYSTEM KEY FEATURES

- ACP-127 client and server
- STANAG 5066 applications
- Internal and/or multi-channel external voice communication and voice recording system
- Optional STANAG 4406 application (X400 & X500)
- Compatible with current ACP-127 systems
- There are no moving parts in the hardware
- A small and compact system (3U height for Redundant System, 1U height for Single System and half of 19" rack width)
- All in one system
- Remote control for radio devices, switching units, data and sound matrices, HF data Modems
- Load sharing as Active-Passive or Active-Active for redundant system
- Third party users can connect to the system via Ethernet
- Unlimited number of clients

INOVATIONS AND FEATURES

Interoperability

- In harmony at interoperability with other Message Operating Systems and STANAG-5066 solutions
- Compatibility with various crypto hardware
- Compatibility with various HF Data Modems (DRS GA123, Rapid Mobile RM6, Harris RF 5710A etc.)
- Compatibility with BRASS structure
- STANAG 4406 support (optional)
- Independent from the Operating System (Compatibility with Linux and Windows systems)

HF E-Mail Transmission

- E-mail transmissions over HF radio networks
- STANAG 5066 e-mail client
- Optional STANAG 4406 X400 e-mail server and client. X500 directory server and client

Interoperability with Existing Applications

- ACP 127 support
- COSS client

Easy and Fast Communication for HF Chat Application

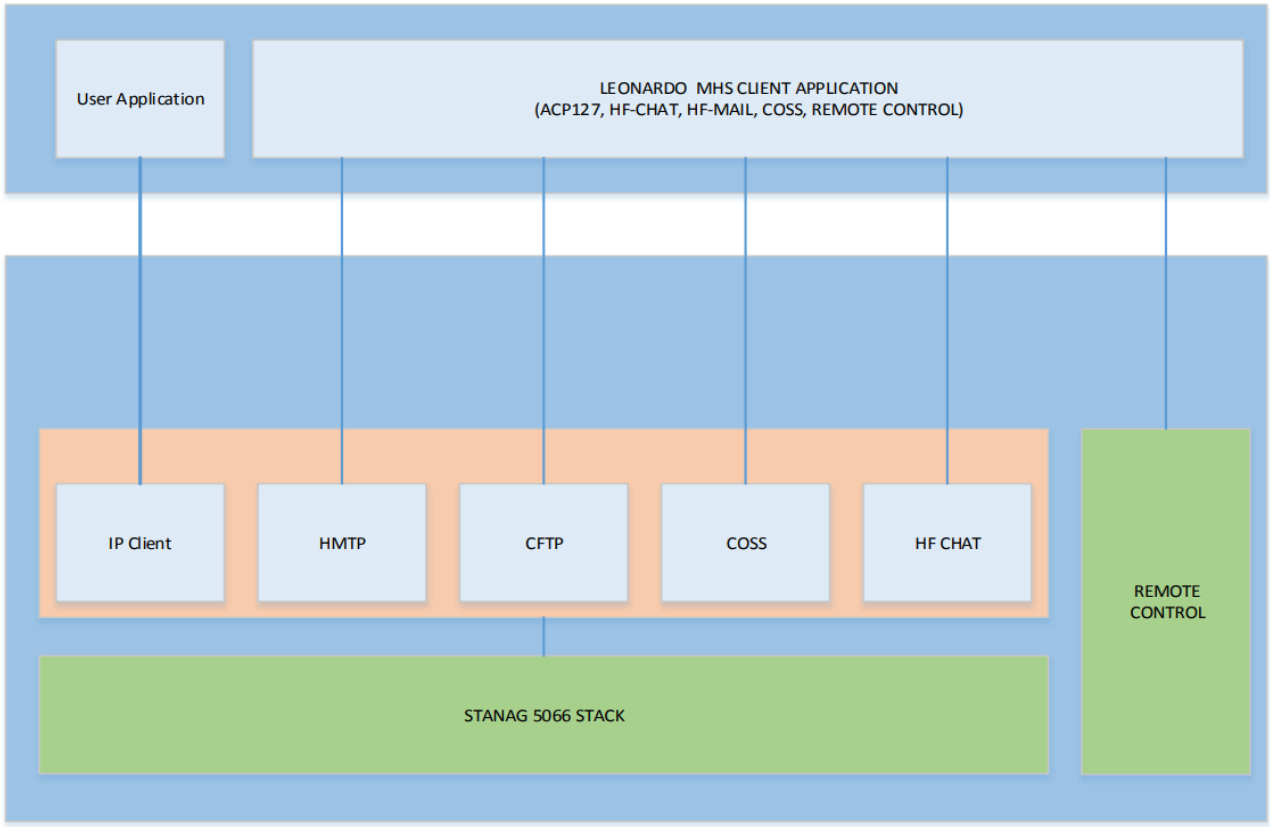
- Alternative communication to e-mail
- Easy and fast messaging

Remote System Control and Supervision

- Remote control features for radio devices, switching units, data and voice matrices and HF data modems
- Synchronous and Asynchronous serial data interfaces

Voice Communication

- Multichannel external voice communication over radio devices
- Internal voice communication
- Voice recording system



REDUNDANT SYSTEM

Main Features

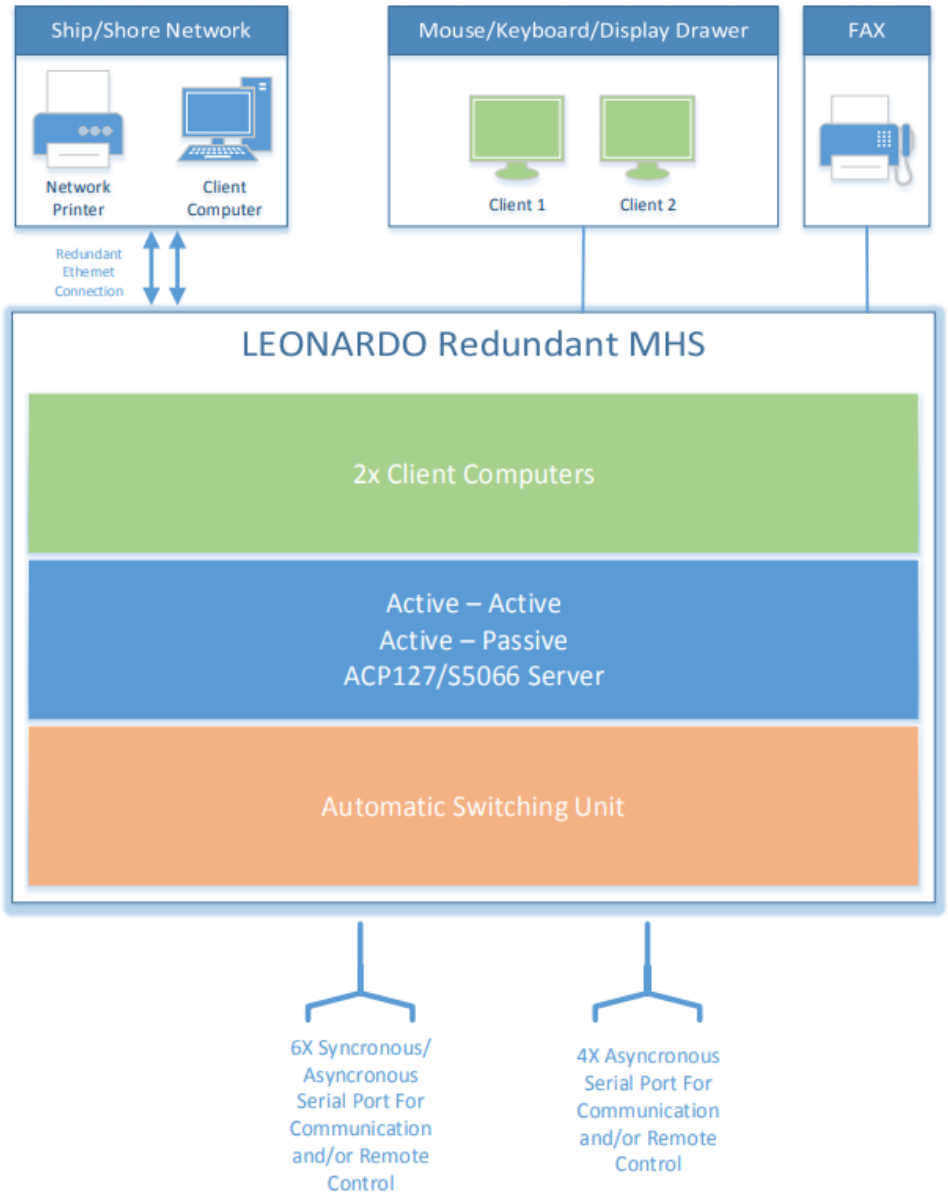
- All-in-one solution with hardware and software redundancy
- No single point of failure
- Automatic switching of Asynchronous and Synchronous ports
- Easy maintenance; all maintenance can be performed while the system is running
- Automatic data backup between internal servers
- No user intervention is required during boot / recovery / backup / failover functions

Repetitive System Architecture

- Ability to distribute channels between redundant systems (Active-Active load balance)
- System architecture that prevents data loss
- Automatic / manual data backup
- Automatic switching unit for communication ports

Compact System Size

- All system is in one unit
- 3U height for Single System and case design suitable for 19” rack cabinet



Technical Features

- 6 x Asynchronous serial ports
- 4x Synchronous/Asynchronous serial ports
- All serial ports can be switchable as master / slave with automatic or manual
- Asynchronous and Synchronous ports can be switchable as automatic / manual

Hardware Features

- 2x Servers
- 1x Arbiter Server
- 2x Ethernet Switches
- 2x Switching Unit Controller Cards
- Redundant Power Supply

Server Hardware

- 1x Intel i7 T Series Processor
- Minimum 4 core per CPU
- 8 GB RAM
- SSD hard disk
- 4096X2304 @60Hz Display Resolution
- 2x Display Ports
- 3x USB 3.0 ports on the front panel
- RAID controller

Power Supply

- 110/220 Vac
- 24 Vdc for emergency

External Ports

- 2x Ethernet ports (for redundancy)
- 4x Display ports (2 for each server)
- Keyboard/Mouse connectors
- USB 3.0 connectors (for each server)
- 4x Synchronous/Asynchronous ports

Software Features

- Client / Server application
- Compatible with Windows/Linux/Mac platforms
- Modern user interface
- Ability to messaging and remote control
- Remote command from Serial and/or Ethernet
- ACP127 and STANAG 5066 support
- STANAG 4406 (optional)
- Data and configuration are kept in SQL database
- Unlimited software licenses in the number of clients that can be connected
- Internal HF Chat application
- Internal HF e-mail application

EMI/EMC and Environmental Conditions

- MIL-STD-461E standards
- MIL-STD-810F standards

Mechanical

- 19” rack mountable
- 3U height

Hardware and software redundancy and all feaatures are in one hardware.

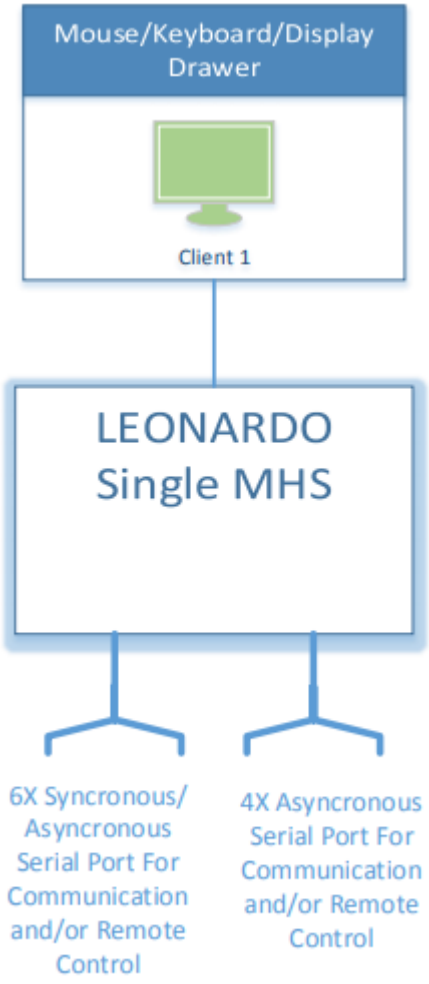
SINGLE SYSTEM

Main Features

- Single system
- Unlike the Redundant System, a non-redundant hardware and software solution in a compact structure
- 1U height and half of 19” rack width and compact design
- 6x Asynchronous / Synchronous ports for communication and/or remote control
- 4x Asynchronous ports for communication and/or remote control
- No moving part in the system
- Use as a military computer

Hardware Features

- 1x Intel i7 T Series Processor
- Min 4 core for every CPU
- Min 8 GB RAM
- SSD Hard Disc
- 4096x2304 @60Hz Display Resolution
- 2x Display Ports
- 3x USB 3.0 ports on the front panel
- Disc Controller with RAID 0,1,5 support
- 2x Ethernet ports
- 4x Synchronous/Asynchronous ports
- 6x Asynchronous ports



Software Features

- Has the same software features with the Redundant System
- Client / Server application
- Compatible with Windows/Linux Platforms
- Modern user interface
- Ability to messaging and remote control
- Remote command from Serial and/or Ethernet port
- ACP127 and STANAG 5066 support
- STANAG 4406 (optional)
- Data and configuration are kept in SQL database
- Internal HF Chat application
- Internal HF e-mail application
- Unlimited software licenses in the number of clients that can be connected

Power Supply

- 110/220 Vac

EMI/EMC and Environment Conditions

- MIL-STD-461E standards
- MIL-STD-810F standards

Mechanical

- 19” rack mountable

Unlike the Redundant System, the single system consists of a non-redundant and software solution in a compact structure.

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