

# FAMILY OF INTERNATIONAL MARITIME SHIPBOARD TERMINALS (MSTx)

Multi-link and multi-band data link solutions that meet diverse maritime missions by providing enhanced situational awareness

L3Harris has expanded our fleet-wide tested, certified and deployed CDL Hawklink system. The MSTx (TRL 9) is designed to support 4+ simultaneous links to address the deployment of manned and unmanned Navy airborne ISR platforms. This system is ready to be deployed to international navies and maritime law enforcement.

# **PRODUCT DESCRIPTION**

MSTx system software is configurable to support L3Harris International waveforms. Network interfaces are fully compatible with the latest SAU7000 digital messaging Interface.

In addition, because of the modular transceiver design, these systems are available for U.S. and international use. AES encryption is available depending on customer needs.

The baseline maritime shipboard terminal features Mini-T2x transceivers with 42" above deck directional antenna(s) and is customizable to meet customer needs.





# Multi-link and Multi-Band Data Link Solution

#### **KEY FEATURES**

- Modular customizable design with 4+ simultaneous links
- > Grade A shock tested Above Deck Equipment (ADE) option
- > Wideband 50 kbps to 135 Mbps
- > Disseminates HD full motion video, acoustics, sensor data
- > Exportable
- Tested to work with MH-60R and other assets

# **ENCRYPTION OPTIONS**

> AES 256 bits

# **OPERATIONAL IMPROVEMENTS**

- Multi-link to provide 4+ simultaneous links
- > Multi-frequency features
- > (L S C and Ku) to support naval and special operations missions
- > Provides greater range to support littoral missions
- > Provides C2 capabilities for UAS
- > Growth to Assured Comms in contested environments
- > Growth to EMCON take-off and landing capabilities

#### **SPECIFICATIONS**

SPECIFICATION	MULTIBAND	KU ONLY			
RF Performance Characteristics					
L-Band, MHz	1625-1850, 0.25MHz Steps	n/a			
S-Band MHz	2025-2110 and 2200-2500,0.25MHz Steps	n/a			
C-Band, MHz	4400-4950 and 5280-5850, 1MHz Steps	n/a			
Ku-Band, GHx	14.4-14.83 and 15.15-15.35, 5MHz Steps	14.4-14.93 and 15.15-15.35, 5MHz Steps			
Waveforms					
International WF, Mbps	0.4, 0.75, 1.5, 3, 3.5, 6, 10, 12, 45	0.4, 0.75, 1.5 ,3, 3.5, 6, 10, 12, 45			
Encryption					
AES	256 bits	256 bits			
Other					
Video	RS-170, Ethernet Video Stream Airborne Dependent	RS-170, Ethernet Video Stream Airborne Dependent			
Voice	Link Audio	Link Audio			

# **SWaP**

SPECIFICATION	SIZE (HXWXD) INCHES	WEIGHT LBS	POWER W			
Flight Deck Equipment						
RF Switch	4.1x3.5x2.6	4	n/a			
Antenna	7.7x6.8x7	4	n/a			
Amplifier	13.5x11.5x6.5	10	5			
Below Deck Equipment						
Transceiver Drawer Assembly (TDA)	5.25x19x24	42	115			
System Controller	3.5x19x24	44	129			
Switch Matrix Assembly(SMA)	5.25x19x20.4	26	84			
Ethernet switch	1.75x16x18.8	4	10			
Computer Drawer	3.5x19x18.8	14	n/a			
Notebook Computer	1.7x11.7x10	5	11			
Uninterruptable Power Supply (UPS)	5.25x19x24	115	126			
Rack/Hardware/Cables	76x24x46	614	n/a			
Multiband Above Deck Equipment	24x21x31	60	110			
Long Range Above Deck Equipment	60x60x60	256	900			

# **ENVIRONMENTAL**

SPECIFICATION	BDE	LONG RANGE ADE	MULTIBAND ADE			
Humidity	0-95 %	0-95 %	0-95 %			
Salt Fog	5%	5%	5%			
Transit and Storage Altitudes	0 to 40,000 feet	0 to 40,000 feet	0 to 40,000 feet			
Shock and Vibration	Designed to meet MIL-STD-810-F and MIL-STD-90-D Grade B	Tested to meet MIL-STD-901-D Grade A	Designed to meet MIL-STD-810-F and MIL-STD-901-D Grade B			
Temperature						
Operating	10 - 35 °C	-25 - 65 °C	-25 - 65 °C			
Storage/Non Operational Temperature	-40 - 70 °C	-40 - 70 °C	-40 - 70 °C			

#### **POWERFUL SYSTEM**

L3Harris has created a family of products designed to deliver the benefits of customization at the system level while maintaining the cost of standardization at the module level. At the core of the system are the Mini-T2x and ROVER®6x product lines. The open system architecture is configurable with multiple waveforms.

AES encryption is available. The system's Ku and Omni directional antennas are designed with U.S. Navy-certified pointing algorithms that account for various seastate conditions.

MSTx is ready to interface with multiple, simultaneous ISR airborne assets, including the P-3, P-8A, MH-60R, MH-60S, MQ-4C Triton or MQ-8B/MQ-8C Fire Scout.

# **APPLICATIONS**

L3Harris multi-link/multi-band data link shipboad system expands the capabilities and flexibility of maritime missions. These data links provide secure real-time, high-speed, air-surface, bi-directional transmission of high-definition video and imagery, as well as acoustics and sensor data. Data links are also capable of Command and Control (C2) of various UAS platforms.



#### Family of Maritime Shipboard Terminals (MSTx)

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