

FAMILY OF MARITIME SHIPBOARD TERMINALS (MST)

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 MST (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 U.S. and international navies and maritime law enforcement.

PRODUCT DESCRIPTION

MST system software is configurable to support Common Data Link (CDL) waveforms, BE-CDL and various other waveforms dependent on the transceiver used. It is fully compliant to Annex C and D. 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. Type 1 and AES encryption is available depending on customer needs.

The baseline maritime shipboard terminal features Mini-T2 transceivers with 42" above deck directional antenna(s) and is customizable to meet customer needs.



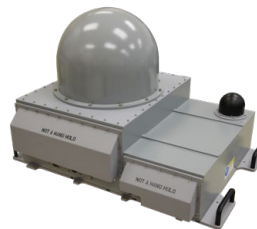
MST Full Size Rack



KU-Band Antenna



MPDL Rack



Multiband Antenna



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Multi-link and Multi-Band Data Link Solution

KEY FEATURES

- > Modular customizable design with 8 simultaneous links
- > Grade A shock tested Above Deck Equipment (ADE) option
- > Wideband 50 kbps to 274 Mbps
- > Disseminates HD full motion video, acoustics, sensor data
- > Exportable
- > Tested to work with MH-60R and other assets

ENCRYPTION OPTIONS

- > Type 1 KGV135
- > Type 1 CCM700A
- > 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

*One specific configuration of the MST is the Maritime Portable Data Link (MPDL). This features a compact rack with a multi-band Above Deck Equipment (ADE) and is for permanent or temporary installs

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, GHz	14.4-14.83 and 15.15-15.35, 5MHz Steps	14.4-14.93 and 15.15-15.35, 5MHz Steps
Waveforms		
Standard CDL, Mbps	0.2 to 45	0.2 to 274
BE-CDL, Mbps	0.2 to 45 Modes 1-15	0.2 to 45 Modes 1-16
Tactical, Mbps	1.6, 3.2, 6.4	n/a
VNW, Mbps	0.5 to 5	n/a
ROVER, kbps	466ER, 466	n/a
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		
Type 1	KGV-135, CCM700A	KGV-135
AES	256 bits	256 bits
Other		
Video	RS-170, Ethernet Video Stream Airborne Dependent	RS-170, Ethernet Video Stream Airborne Dependent
Voice	CDL Audio	CDL 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
MPDL Rack/Hardware/cables*	38.50 x 24.60 x 21.90	60	
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	-40 - 70 °C	-40 - 70 °C	-40 - 70 °C
Temperature			

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Family of Maritime Shipboard Terminals (MST)

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L3Harris Technologies is a Trusted Disruptor for the global aerospace and defense industry. With customers' mission-critical needs always in mind, our 46,000 employees deliver end-to-end technology solutions connecting the space, air, land, sea and cyber domains. L3Harris.com.

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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-T2 and ROVER®6 product lines. The open system architecture is configurable with CDL and BE-CDL waveforms.

Type 1 and AES encryption are available. The system's Ku and Omni directional antennas are designed with U.S. Navy-certified pointing algorithms that account for various sea-state conditions.

MST 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 shipboard 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.



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