

MarCom® IP-INTEGRATED COMMUNICATIONS CORE

L3Harris' MarCom product line enables all IP-integrated communications solutions or any mix of IP and legacy technology. Our integration team reduces O&M manpower, improves mission effectiveness and reduces total cost.

PRODUCT DESCRIPTION

The MarCom IP-Integrated Communications products provide an open systems architecture foundation for highly integrated tactical communications networks on maritime platforms. Our solutions reduce acquisition cost, enable reduced platform manpower, simplify cable plants and greatly improve communications effectiveness by making information available directly to those who need it.

The result is improved situational awareness and mission effectiveness. The MarCom IP-Integrated Communications products address communications planning and execution within a radio-agnostic external communications suite, interface baseband traffic to shipboard networks, provide voice services throughout the platform and remotely monitor ship systems. Products address switching, conferencing, protocol translation, call processing, integrated tactical terminals, information management and external system interfacing.

MarCom IP-Integrated Communications products provide future-proofing for easy, affordable upgrades as technology evolves.

KEY FEATURES

- > Interoperability of VoIP, ISDN, POTS phones, wireless handsets, and integrated tactical terminals (IP or traditional digital)
- > Access to all voice systems including: announcing and alarms, radio networks, voice recording, entertainment, damage control and shore lines
- > Flexible analog and digital interfaces for any baseband signal type
- > Compact, modular, rugged packaging
- > Centralized and distributed system architecture
- > Remote and automated control from any workstation
- > A single voice terminal supports all voice services
- > 100% non-blocking architecture
- > Powerful conferencing and netting services
- > Military-grade security provisions
- > Complete interoperability among IP or legacy interfaces
- > True intercom without the cost and weight of legacy systems

APPLICATIONS

- > Any maritime platform, shore station or command center
- > Shipwide integrated communications and networks
- > Radio suites and integrated voice systems
- > Ruggedized for airborne environments



KEY BENEFITS

- > Low-cost integration of diverse systems
- > Scalable for patrol boats, subs, cutters, cruisers and carriers
- > Greatly reduces manpower
- > Accurate immediate execution of comm plan changes
- > Reduces cost of procurement, operation and maintenance
- > Reduces footprint and weight
- > Improves situational awareness-guaranteed exchange of critical tactical orders and status
- > Low cost logistics - minimal training and minimal spares
- > Increases operator efficiency
- > Information protection and connectivity assurance
- > Provides a smooth evolution to an all-IP platform
- > Outstanding reliability and availability



L3Harris integration core products enable the formation of robust tactical communication networks for maritime platforms

TYPICAL TACTICAL COMM SYSTEM ELEMENTS

- > **Infrastructure Elements:** MarCom IP switches, IP network interfaces, network termination drawers and wideband audio Digital Switches (WB-ADS) along with network switches and servers
- > **User Instruments:** K2 tactical terminals, rugged phones (VoIP, ISDN, and POTS), handheld wireless phones, microphone control stations, laptops and workstations
- > **Integrated subsystems:** announcing and alarms, entertainment and training, surveillance CCTV and wireless
- > **Integrated Excomm suites:** WB-ADS through RF and topside
- > IP conversion greatly reduces cable plant cost and complexity and reduces importance of collocation
- > Provides evolution to mixed legacy/IP communication suite
 - Reduces costs during transition period
 - No need for wholesale replacement of communication equipment
- > L3Harris Symphony® communications manager reduces training needs

IVCS PERFORMANCE CHARACTERISTICS

- > Highly redundant core architecture supports extensive tactical feature set
- > Fully non-blocking tactical users
- > External timing synchronization
- > Highly configurable to accommodate a wide variety of platforms with fiber backbone connectivity
- > Supports devices and interfaces with a wide variety of commercial and military standards
- > Supports any mix of users from all IP to all legacy

EXCOMM PERFORMANCE CHARACTERISTICS

- > Supports both centralized and distributed switching via IP networks using the MarCom IP network interface for conversion of legacy interfaces to IP
- > Logistics are simplified with only a few card types
- > Accurate and timely execution of comm plan
- > Highly effective flexible integration of disparate equipment types
- > Very low latency for critical circuits

PHYSICAL CHARACTERISTICS

- > MarCom Server
 - Size: 1U COTS/ MOTS server
- > Wideband Audio Digital Switch
 - 1U Rack
 - Size: 1.8"H x 19.0 W x 14.5"D
 - Power: 100 W
 - Weight: 10 lbs
 - 3U Rack
 - Size: 5.2"H x 19.0"W x 17.0"D
 - Power: 500 W
 - Weight: 34 lbs

ENVIRONMENTALLY QUALIFIED

- > Shock: MIL-S-901D, Grade A, Class 1, Type A
- > Vibration: MIL-STD-167
- > Temperature: MIL-STD-810 (0 to 50°C)
- > Relative Humidity: 95%

SECURITY

- > Red and Black voice traffic system architecture
- > Cybersecurity management compliant

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This document consists of L3Harris general capabilities information that does not contain controlled technical data.

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



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