SHIPBOARD INTEGRATED COMMUNICATIONS SYSTEM

Enabler of Digital Transformation





Key Features

Shipboard Integrated Communications System

Intercommunications and Telephony Services

- Point-to-point intercom
- Fixed and ad hoc conferences
- Split-ear operations
- Call transfer
- Call hold
- Call intrusion

Radio Communications

- Ship-to-ship, ship-to-air, ship-to-shore for joint operations
- Supports LF, MF, HF, VHF and UHF
- Radio access, multi-party radio access, single and multiple radio monitoring, radio patching, radio silence and remote radio control

Data Communications

- External data communications to provide for the switching of data terminals to radios
- Internal data communications via LAN



Wireless Communications

Facilitates crew mobility

Satellite Communications

Voice and data satellite communications



System Management

• Supports system configuration and supervision

Radio Management

Remote centralised control and management of various types of radios

Voice Logging

Selectable communications channels

Public Address Broadcast and Alarm • Interfaces to PA/alarm systems

Security



• Provides system security by supporting connectivity to various encryption devices



- secure voice/data single radio source • Touch screen user
- Enables multiple users to share a
- Ruggedised and suitable for unsheltered naval environment

The Shipboard Integrated Communications System (SICS) is a state-of-the-art IP based communications solution designed and built for the mission-critical needs of today's navies.

transmission

interface

signal processing

over IP LAN/WAN

• Supports distributed

switching architecture

The SICS integrates a variety of communications systems to offer feature-rich voice and data services easily accessible by users from fixed and wireless terminals.

Key Benefits

Open Interface and Architecture

• IP based system which uses open standard protocols such as SIP based VoIP, for easy system integration

High Survivability and Availability

• Distributed and redundant architecture with no single point of failure

Interoperability

• Facilitates communications interoperability between disparate communications systems

Integrated Communications Services

- Satellite and radio communications (LF, MF, HF, VHF, UHF and other radios) for ship-to-ship, ship-to-air and ship-to-shore operations
- Data communications over radio network, WAN and LAN



- System management that provides configuration settings and status monitoring
- Radio management that enables remote control and monitoring of radios

User-Friendly Interfaces

- Intuitive user interfaces designed to support situational overview and quick system operation
- Configurable hot keys
- Mission profile planning

High Scalability

• Touch screen user interface

• Available in console mount

or bulkhead mount

• Designed based on IP protocol and infrastructure, the SICS is highly scalable to meet future needs and demands

Network Management

- System can be re-configured for varied missions
- Quick operational configuration with pre-loaded mission profiles
- · Centralised control and communications planning of radio resources

Technical Data

Switching Capability

- VoIP based on Session Initiation Protocol (SIP)
- Ethernet backbone connection up to 1Gbps
- Centralised or distributed switching with heartbeat monitoring between servers and database synchronisation
- Configurable fixed radio and/or line conference of up to 128 parties
- System and radio management

Power Supply

- 110/230 VAC
- 28 VDC for terminal devices

Inter-Communications Server Connection

- Dual 1Gbit Ethernet
- Configurable to operate in fall back mode with no degradation in services

Interfaces

- Ethernet : IP Phone/Radio
- Analogue Radio : 4-wire Tx/Rx/PTT, RS232
- Line : FXS to DTMF phone
- Trunk : FXO to PSTN/PABX
- Digital I/O (optical isolation input and output)

* Specifications are subject to change without prior notice

Environmental Specifications

Temperature

- 0°C to +50°C (operating temperature)
- 0°C to +65°C (storage temperature)
- MIL-STD-810G Method 501.5 (high temperature) Method 502.5 (low temperature)

lumidity

- Up to 95% relative humidity, non-condensing
- MIL-STD-810G, Method 507.5

Shoc

• MIL-STD-810G, Method 516.6

Vibratio

• MIL-STD-167-1

EMI/EMC

• MIL-STD-461E



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