VICS FOR VESSELS

Enabler of Digital Transformation

ST Engineering

Core Components

Feature-rich, Small and Common Form Fit Factor

Single Crew Unit (SCU)
Provides voice and data services with interfaces to user headsets, data terminals and radios

Dual Crew Unit (DCU)
Provides voice and data services with interfaces to user headsets, data terminals and radios

Radio Interface Unit (RIU)
Provides additional radio interfaces and controls

Ethernet Interface Unit (EIU)
Provides additional Ethernet interfaces

Vehicular Integrated Communication System (VICS) For Vessels

The Vehicular Integrated Communication System (VICS) for Vessels is a versatile, ruggedised and reliable communication and network solution suited for naval and coast guard patrol vessels, small vessels and fast crafts in the maritime environment.

Leveraging IP technology, the VICS for Vessels facilitates the convergence of voice and data (including video) services for collaborative engagement and mission critical operations. The compact and feature-rich the VICS for Vessels provides an integrated and unified communication platform with easy access, control and monitoring of both internal and external communications required in coastal patrol operations.

Key Features

- IP-based, High Speed Ethernet Infrastructure
  – Improves survivability
- IP-based Voice and Data Communications
  – Provides integrated voice and data communications
  – Enhanced conferencing feature
- Intelligent Crew Unit
  – Split-ear operation
  – Eyes-free operation
- High Survivability
  – Distributed Network Design
  – No single point of failure

Single Crew Unit (SCU)
Ethernet Interface Unit (EIU)
2 x Radios
IP Phone
Speaker
Headset
Radio Interface Unit (RIU)
Dual Crew Unit (DCU)
2 x Radios
2 x Radios
2 x Radios
Headset Headset

Key System Capabilities

Communication Services

The VICS for Vessels provides a high speed Ethernet ring IP backbone that consists of Crew Units, Radio Interface Units and Ethernet Interface Units designed for space constrained tactical platforms. It enables integration and interoperability of various communication systems including

- Radios such as UHF, VHF, HF radios, High-speed Data Radio (HDR) and Personal Role Radio (PRR) etc.
- Satellite Communications
- Telephony System, PABX, PSTN etc.
- Public Address (PA) and alarm systems
- IP video sources
- Voice Logger
- Voice / data separation
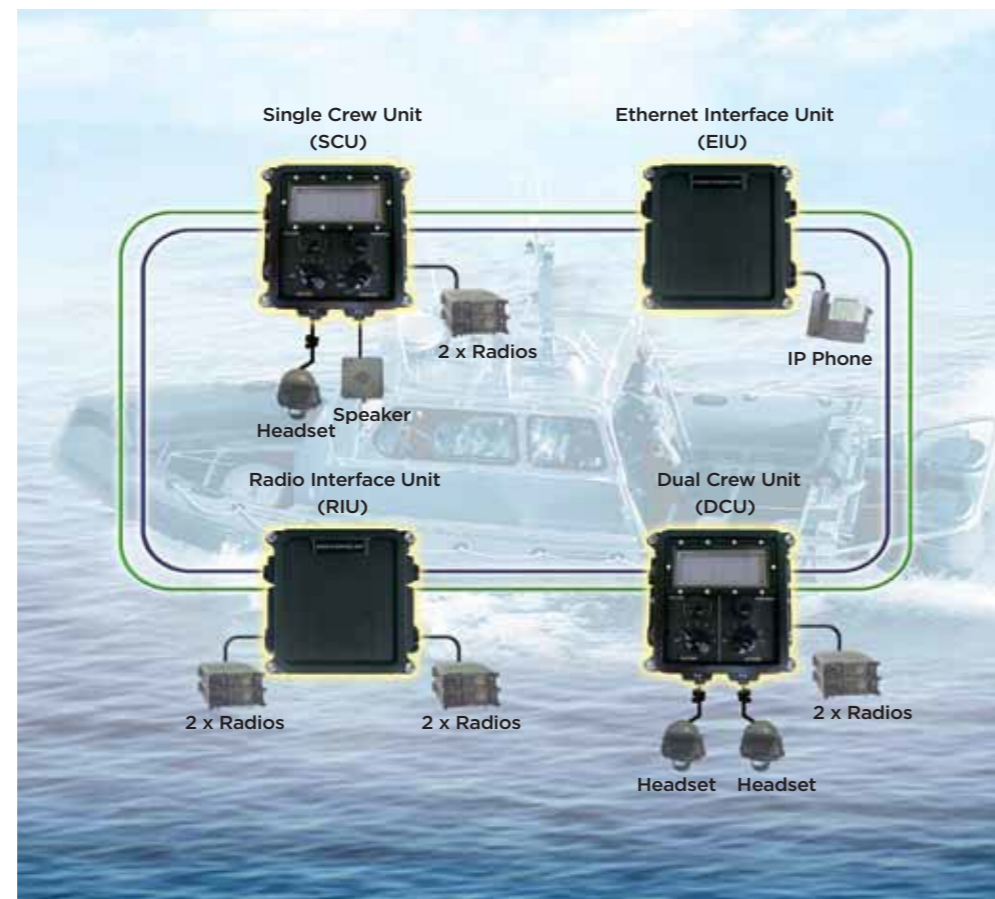
System Scalability and Reliability

- Adopts a scalable, modular and expandable system architecture that supports different interface requirements and configurations
- Survivable high speed Ethernet ring architecture
- Distributed power supply

System Management

- Provides system configuration and monitoring
- Supports radio control and management
- Supports radio patching for rebroadcast and interoperability

Suitable for Small Marine Vessels

Environmental Specifications

Temperature
• Operating -10ºC to +55ºC
• Storage : -20ºC to +71ºC

Solar Radiation
• In compliance with
 MIL-STD-810

Humidity
• Up to 95% relative humidity,
 non-condensing
• In compliance with
 MIL-STD-810

Salt Fog
• In compliance with
 MIL-STD-810

Shock
• In compliance with
 MIL-STD-810

Vibration
• In compliance with
 MIL-STD-810

EMI / EMC
• In compliance with
 MIL-STD-461

*All specifications are subject to change without prior notice

Technical Data

General
• High speed Ethernet ring backbone. Configurable to operate in fall back mode with no-degradation in services
• System and radio management

Power Supply
• MIL-STD-1275 compliant distributed power supply
• 18-32 VDC input

Interfaces
• Ethernet - IP phone / IP radio / data terminals
• Analogue Audio : 4-wire Tx / Rx / PTT
• RS232
• All user terminals are configurable for dual homing

Awards

• CRP (Congrès de la Radiacommunication Professionnelle) Outstanding Product Trophy for SuperneT™ Radio Gateway ST2860
• Asia Pacific ICT Awards (APICTA) - Merit Prize (Communication Applications Category) for SuperneT™ Integrated Communication System ST2800
• Infocomm Singapore Awards for SuperneT™ Integrated Communication System ST2800
• IES Prestigious Engineering Achievement Award for SuperneT™ Integrated Communication System ST2800

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