

>> The Best Value Solution

As a proven world class multimedia vehicle intercom system, SOTAS offers a rugged, user-friendly, scaleable system with excellent audio quality, and ready for future growth:

- **One System for the Whole Fleet:**
SOTAS systems can be configured to range from a voice and serial data intercom to a command post Local Area Network System, offering a complete range of communication services.
- **Crystal Clear Communication:**
The SOTAS system uses the latest Dynamic Noise Reduction (DNR) technology, removing the vehicle noise from the microphone signal and enhancing the speech quality and intelligibility. In doing so, SOTAS distributes a clear audio signal to both the vehicle crew as the radios. The current fielded third generation DNR is a mature system that has proven to be very effective.
- **Poised for Future Growth:**
SOTAS is specifically designed with an open architecture and therefore easily adaptable for changes. This modularity makes it possible to offer solutions that optimally match current and future requirements, providing a system that can be adjusted to emerging requirements and future growth. SOTAS is the core element in Thales Mobile Tactical Internet Solutions M@tis.

Thales - World Leader in Mission-Critical Systems Integration

With operations in 50 countries and 68,000 employees, Thales is a world leader in Mission-critical information systems for the Aerospace, Defense and Security markets. Building proven capabilities in large and complex software systems, Thales steps up to the security challenges of its customers in an increasingly interconnected, technology-driven world. Civil and military systems benefit from many of the same technologies and innovations. Developing these dual technologies has been a long tradition for Thales, with its global network of 22,000 high-level researchers. Leveraging a global presence and spanning the entire value chain, from prime contracting to equipment, Thales plays a pivotal role in making the world a safer place.

Thales Nederland is a member of the Thales group. With more than 2,000 employees we produce and develop top performing technology on a daily basis.

Thales has a comprehensive range of C4ISR products and solutions for air, land and naval forces, joint structures, special forces and homeland security services to achieve full situation awareness and information superiority. The SOTAS family of products is just one of an outstanding range of military and civil communications products and services that Thales has to offer. SOTAS is a mature, combat-proven system, with 18,000 systems deployed in 48 vehicle types in 28 countries throughout the world, demonstrating the systems' diversity and flexibility.

As a leading defense supplier, our products are compliant with the most stringent military requirements. Thales has the highest AQAP and ISO9000 military standards accreditation.



>> Optimal Solutions for the Battlefield

Today, armed forces are involved in a wide spectrum of operations, from humanitarian aid to high intensity conflicts. Joint Forces have to be prepared for all kinds of operations with any possible coalition partner. Tactical systems that support different missions are crucial. A versatile communication and information system is a key element in current operations.

With constantly changing rules of engagement, units and soldiers have to react immediately on events that occur. Whether you need a voice only intercom solution or a complete multimedia command post network, with the SOTAS product family you can have it all. SOTAS offers a robust, easy to use, adaptive, versatile communication system.

A system that provides flexible information support from the headquarters down to the soldier in the field. It gives shared situational awareness to all participants and with its modular design, the system can be easily adapted and enhanced at any time and without disturbing the initial installation. With SOTAS, you are prepared for the changing requirements of modern warfare.

Operational in 28 countries, with 18,000 systems deployed in more than 48 vehicle types, SOTAS is present in theaters all over the world, such as Afghanistan, Bosnia and Irak. It is a battlefield proven, rugged, scaleable, innovative system that offers excellent audio quality, dynamic noise reduction, IP services, and a high level of user friendliness. Over the years SOTAS has demonstrated its superior qualities over and over again. This makes SOTAS a truly proven and world class multimedia vehicle intercom system.



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> SOTAS
The world class multimedia vehicle intercom system



Seamless Battlefield Communications

Vehicle Communications

- Wide spectrum of services: intercom, radiocom, telephone, Ethernet, IP serial data, video and vetronics-networks
- Supreme audio quality in high noise environment through Dynamic Noise Reduction for both radio and intercom
- Hands free intercom for user friendly access
- Embedded IP services like IP routing, DHCP, Voice over IP (SIP, H323)
- Integration with vehicle information systems (CAN, GPS, Alarms...)
- Voice alarm messages for instantaneous vehicle status
- Fully MIL-Spec ruggedised C/MOTS

Command Post Communications

- Scaleable from Voice Intercom to large Command Post Networks
- Networking between vehicles (command posts, tactical weapon systems)
- Plug and play networking for wired and wireless (WiFi) communication
- Full intercom and telephony between vehicles
- Access to all CNR radio's in connected vehicles
- Local Area Network for all data devices in the vehicle network

Soldier Communications

- Seamless voice and data communication down to dismounted soldier
- Automatic radio relaying from the soldier to higher authorities
- Fully interoperable with vehicle intercom systems
- Power and interfacing provisions for soldier on board of the vehicle

In-vehicle and inter-vehicle communications

SOTAS is originally designed as an intercom system, easy to operate, providing crystal clear voice communications inside the vehicle and over the radios by using Dynamic Noise Reduction. However SOTAS is more than meets the eye. It is a high performance multimedia networking system that switches voice and data. With the automatic network configuration capability, a fully functional Vehicle Local Area System is established by connecting the SOTAS systems together: voice, data, video communications, sharing of radios, sensors and computer resources. The result? Improved protection and situational awareness.

Value-added networking capabilities

With the available IP/Ethernet interfaces and IP services, SOTAS enables users to inter-work in the tactical internet using standard IP-based applications. This means that operators from one platform can gain access to assets such as radios in another platform. SOTAS also provides Voice over IP telephony services and enables authorized Voice over IP users on external networks to access the SOTAS services. If needed, SOTAS has an integrated multiport Ethernet switch available, eliminating the need for external boxes. The SOTAS system is ready to support radio data communication and provides access to vetronics information.

SOTAS product family

SOTAS includes a family of switches, crew boxes, and devices that comprise the SOTAS product family. The flexible architecture of the SOTAS product family allows you to start with a basic configuration and upgrade later to a more extended system configuration.

Standard Crew Station

The Standard Crew Station (CM2) provides the user interface to the intercom facilities and to the radios. The LEDs display the radio traffic status and the system status. The two audio interfaces and a serial data interface support the connection of audio ancillaries, data terminals and/or Combat Net Radios, all software configurable.



The network capability provides a virtually unlimited voice and data communication system. Users in different vehicle are then able to share intercom circuits, radios and data.

Peripheral interface of the CMSU and crew stations are software programmable audio and data interfaces to support a huge variety of Combat Net Radios, headsets, telephony equipment and alarm devices.

The CMSU has a modular hardware design, enabling easy customization to vehicle configurations and simplifying future upgrades.

Advanced User Station

The Advanced User Station (AUS) provides a menu driven Man Machine Interface. The frequently used services are accessed by a single key action. Drill down menus give access to the advanced features such as telephony and system management & maintenance services. The menu structure and text can easily be customized.



Vehicle Tactical Server Platform

The SOTAS Vehicle Tactical Server Platform (VTSP) is a perfect blend of COTS standards and rugged MIL-Spec construction; it is robust computer with available interfaces such as Ethernet, CAN and video. This generic solution offers the capability to host additional (third party or legacy) software functions and services (e.g. access to vetronics information, video streaming and communication servers). The VTSP can be stand-alone or integrated in the CMSU.



Central Multimedia Switching Unit

The Central Multimedia Switching Unit (CMSU) forms the heart of the system. It provides connectivity for peripherals and all types of crew stations and radios. Multiple CMSU can be interconnected by means of optical fiber cables to form a high-speed multi-service network.



The CMSU manages all voice and data services, monitors the system status and has the capability to provide a robust and self-healing network service between vehicles.

Vehicle Tactical Router and Switch

The SOTAS Vehicle Tactical Router and Switch (VTRS) provides Ethernet switching and IP routing capabilities, both wired and wireless (OSPF and OLSR) in a ruggedised solution. For Power Devices, Power over Ethernet (802.3af) is available. The VTRS can be integrated on the CMSU to realize a 100Mbps networking capability.

