TOCNET®-G4

TACTICAL INTERCOMMUNICATIONS SYSTEM

SCI

ZER((●))ALPHA
SOLUTIONS

TOCNET-G4

The TOCNET Legacy of Success

For more than a decade, TOCNET has played a critical role in ensuring that soldiers, airmen, sailors and marines have access to battle-critical, secure and reliable communications.

Throughout its extensive service history, TOCNET has provided a lifeline of communications by interconnecting dissimilar radio and telecommunications assets, and by linking the most remote and isolated expeditionary warrior at the farthest outpost with the distant, higher-echelon command centers directing the fight.

TOCNET is widely fielded within the US Army and is the standard intercommunications system (ICS) of the US SOCOM & Marine Corps' fleet of tactical vehicles. Backed by an extensive logistics support trail, TOCNET is fielded in more than 15,000 systems, encompassing more than 100,000 TOCNET units.

SCI continues to invest in the TOCNET product family with expanded features and capabilities, and is dedicated to ensuring that TOCNET remains the most advanced vehicle and command post ICS available.

US SOCOM Adoption Through Proven Performance

TOCNET-G4 was recently selected by the US Special Operations Command (SOCOM) as the ICS for the **Ground Mobile Vehicle (GMV) 1.1**. SOCOM chose TOCNET based on its Size, Weight and Power and Cost (SWaP-C) reductions, as well as several functionality enhancements that are 10 years ahead of other systems.

TOCNET-G4 was deemed the intercom of choice based on a recent maritime intercom trade study and user evaluation performed by the Naval Air Warfare Center Aircraft Division (NAWCAD) Special Communications Mission Solutions (SCMS). The primary discriminating factors were TOCNET-G4's SWaP-C and remote radio control interface capabilities including SOF-specific radio firmware and operations.

In the trade study, **TOCNET-G4 received the top rating** overall and significantly outperformed Harris's 7800I, Telephonics' NETCOM-V, and Gentex's LViS offerings in all categories. The NAWCAD/SCMS study provided the necessary input for the selection of the TOCNET-G4 intercom system to be used in SOCOM's next generation combatant craft platforms.

TOCNET-G4 received the **highest rating in all seven categories**:

Intuitive Operations, Meeting System Requirements, Audio Quality, Operations in Low-Light Conditions, Operations in Adverse Conditions, Suitability For Use in a Maritime Environment, and **Best Overall Solution**.

The Next Generation. Now.

TOCNET-G4 (Generation 4) is SCI's most advanced tactical intercommunications system (ICS) to date. Leveraging both current and emerging technologies, TOCNET-G4 is the next evolution in increased performance, ease-of-use, capability and dramatically reduced SWaP-C. Rugged, modular and highly scalable, TOCNET-G4 is fully capable of enhanced network integration and/or stand-alone operation. With TOCNET-G4, the future of tactical communication is now.
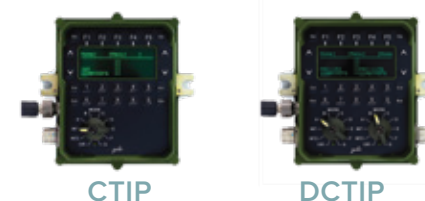
Basic Crew Interfaces

› Blind Touch Operation
› TX and Mon Channel Selection
› Override Channel Selection
› Microphone Mode Selection: PTT, VOX, Hot Mic
› Binaural Audio and Volume Control
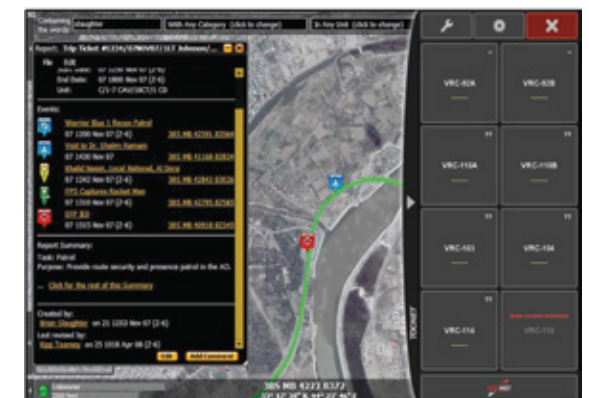› Options for 1, 2, or 4 Operators per TIP
› Options for Loudspeaker Interfaces

TIP   DTIP   QTIP

Advanced Crew Interfaces

› Blind Touch Operation
› TX and Mon Channel Selection
› Override Channel Selection
› Microphone Mode Selection: PTT, VOX, Hot Mic
› Binaural Audio and Volume Control
› Options for 1 or 2 Operators per TIP
› Menu, Display and Buttons for Advanced Operations
› Remote Radio Control
› VoIP and P2P Calling
› Radio Cross Banding Management
› System Status and Management

CTIP   DCTIP

Software Applications

› Java-based, Platform Independent: Windows, Linux
› IP-based, Small Footprint, Low Bandwidth
› User-Friendly GUI for Enhanced Operations/Maintenance
› Multiple Robust Audio Interface Options
› Voice Recording Options for Mission Analysis/Training
› Android™ Option for Increased Mobility
› System Configuration Management

Central Hub/Switch/Gateway

› Power Input and Distribution
› 2 Gigabit Ethernet Interfaces
› 2 Intercom Bus Interfaces
› 4 Multifunction Interfaces (MFIF)
› Expansion via IHUBs
› Up to 16 Radios and 20 TIP Operators per Local Node
› Network Expansion with up to 1,024 Assets
› Selection of Multiple Configurations
› Radio Gateway (Radio Agnostic) - Support for Military and Commercial Radios
› Remote Radio Control
› Radio Cross Banding and Relay
› IPv4/v6/Dual Stack Connectivity
› Extensive VoIP (H.323 and SIP) w/ Compression Options
› Voice Cross Banding and Conferencing of Radios, VoIP and other Voice Assets
› Type 1 Secure Wireless Extension

XPHUB   IHUB

TOCNET-G4 is the ICS solution of choice for any tactical mission — whether the objective is on land, in the air, or at sea.

Qualifications and Certifications

Storage Temperature .... MIL-STD-810G, Methods 501.5 and 502.5, Procedure I, -50°C to +71°C
Operating Temperature .... MIL-STD-810G, Methods 501.5 and 502.5, Procedure II, -40°C to +55°C
Immersion .... MIL-STD-810G, Method 512.5, Procedure I, 1 meter, 30 min., 27°C differential
Vibration .... MIL-STD-810G, Method 514.6, Procedure I, Category 20, Tracked Vehicle
Shock .... MIL-STD-810G, Method 522.1, Procedure III (Ballistic Shock)
Humidity .... MIL-STD-810G, Method 507.5, Procedure II
Sand & Dust .... MIL-STD-810G, Method 510.5, Procedure I followed by Procedure II
Salt Fog .... MIL-STD-810G, Method 509.5 (24/24/24/24)
EMI/EMP .... MIL-STD-461F, Army Ground to Include RS 105
Power Conditioning MIL-STD-1275E
Authority to Operate (ATO) on U.S. Army SIPRNET through CPP/SICPS Programs
Certificate of Networthiness (CoN) for the Soft CAU
JITC Certified

SCI Technology, Inc.
Delivering Critical Information At the Point of Need

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