



CERTIFIED BY  TO TIA/EIA 568 CAT 5E AND CAT 6

RUGGED GIGABIT ETHERNET CONNECTORS

AMETEK[®]
SCP, Inc.

FOR EXPLOSIVE SHOCK, VIBRATION,
DEEP SUBMERGENCE OR HARSH
SURFACE ENVIRONMENTS.

WHERE QUALITY AND HIGH PERFORMANCE RUN DEEP

AMETEK SCP, INC. HAS BECOME THE LEADING GLOBAL PROVIDER OF CONNECTOR AND CABLE ASSEMBLY PRODUCTS BY MEETING THE RIGOROUS DEMANDS OF THE SUBSEA ENVIRONMENT. WE HAVE STAYED AHEAD OF MARKET REQUIREMENTS BY OFFERING SUPERIOR TECHNOLOGY, FLEXIBILITY, RESPONSIVENESS AND THE HIGHEST QUALITY ASSURANCE.

As a result of research done in the early 1970s, Ethernet has evolved into the most widely implemented physical and link layer protocol today, and has been rapidly overshadowing networking connection choices such as Token Ring and ATM.

Fast Ethernet increased speed from 10 to 100 megabits per second (Mbit/s). Gigabit Ethernet is the next iteration, increasing the speed to 1000 Mbit/s. The initial standard for Gigabit Ethernet was standardized by the IEEE in June 1998 as **IEEE 802.3z** – commonly referred to as 1000BASE-X (where -X refers to either -CX, -SX, -LX, or (non-standard) -ZX).

As Fast Ethernet becomes more widely deployed, Gigabit Ethernet will increasingly be used to help fortify bandwidth at the network backbone and server.

The SCP, Inc. Gigabit Ethernet connector is now available in two configurations: (1) for underwater or outboard of the submarine or undersea systems in oil/gas and exploration applications and (2) for surface or inboard applications of ships, submarines, tanks, and aircraft and land systems.



**SURFACE APPLICATIONS
AND FUTURE COMBAT
SYSTEM VEHICLES**



KEY FEATURES

Pin arrangement is optimized for maintaining the integrity of the twisted wire pairs.

The shortest Mil Spec contacts are used for COTS advantage.

Pin and socket concept is used to ensure no loss of data packets during shock and vibration.

Polycarbonate insulator material is used for dry applications and polyurethane and epoxy for underwater applications.

D38999 Plug for COTS is used for dry application and MIL-C-24231 for deep submergence application.

M26643/59/60/61 CAT 6 pigtails are applied for underwater application with low smoke jacket for internal use and polyurethane jacket for the external application.

Termination method keeps the twist down to the pin to reduce cross talk.

Also available with power pins in the same configuration around the CAT 6 cable.



HIGH-PRESSURE UNDERWATER APPLICATIONS



Photos courtesy of the U.S. Department of Defense



High-Pressure Underwater Applications

- With or without power (16 AWG)
- 2000 psi rated
- MIL-C-24231 Connector Series
- Available with glass to metal seals for higher pressure ratings



Surface Applications and Future Combat System Vehicles

Compatible with:

- MS D38999 Connector Series
- MS D28840 Connector Series
- IP67 Sealing

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Founded in 1987, SCP, Inc. is the leading manufacturer of underwater electrical and optical connectors and cable assemblies for the military and commercial markets worldwide.

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