

MISSILE DEFENSE

MISSION-CRITICAL SOLUTIONS DESIGNED FOR HARSH ENVIRONMENTS

Mission-Critical Flight and Precision Targeting with Smaller, Lighter, Faster, Reliable Interconnects and Systems

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HELPING YOU DESIGN THE NEXT ADVANCED MISSILE SYSTEM

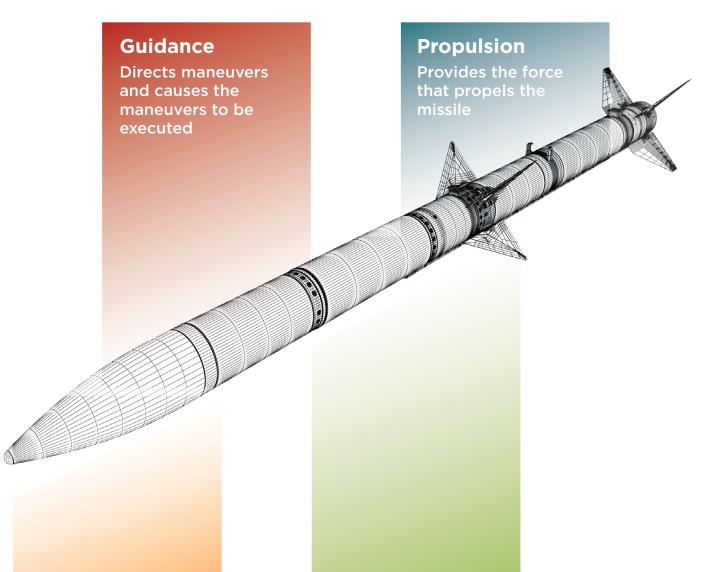
Design engineers are challenged to create missile systems that are smaller, lighter and more reliable to keep up with today's complex, combat environment. Every missile must be designed to perform flawlessly at a moment's notice and at TE Connectivity, we're here to help you every step of the way.

Managing Multiple Connections With One Partner

The next generation of missile systems are creating new demands on electronics to work in harsher operating environments where temperature, vibration and voltage cannot be compromised. These demands cause for new levels of expertise to connect the subsystems that communicate, navigate and position the missile system while reducing SWaP—size, weight and power consumption.

The TE Difference for Design Engineers

We're here to support design engineers whether it be through our robust product portfolio which span multiple defense applications or our systems engineering team that can work through drawings alongside you. Begin the conversation with a TE engineer today and experience the difference of working with one partner that can make multiple connections.



Control Executes maneuvers

Warhead Carries the explosive charge of the missile

Missile Systems We Can Support

RESPONSES

- Air-to-Air
- Air-to-Surface
- Surface-to-Air
- Surface-to-Surface

THREAT LEVELS

- Strategic
- Theater
- Tactical

THREAT TYPES

- Anti-Armor
- Anti-Ballistic
- Anti-Ship
- Anti-Sub

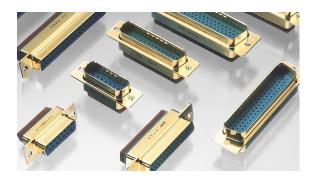
LAUNCHERS

- Fixed Launchers
- Mobile Launchers
- Unpowered Guided Weapons

Sub-Systems We Connect

- Antennas
- Flight Control Components
- Batteries
- Guidance Processor Unit
- Inertial Navigation
- Launch Cannisters

Rectangular Small Form Factor Connectors







D-SUB AMPLIMITE CONNECTORS

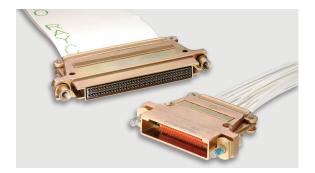
TE's D-Subminiature connector portfolio is designed for multiple applications, along with specialized accessories that will provide any customer with an economical D-Sub solution for any complex application. The AMPLIMITE D-Subminiature connectors are qualified to the MIL-DTL-24308 specification. Our series 109, series 90, and ULTRA-LITE connectors offer a full range of contact densities, as well as weight-savings and EMI shielding. Our portfolio includes AS39029 contacts and DB-15 connectors, as well as coax and power contacts.

MICRO-D CONNECTORS

TE's microminiature d-sub connectors includes popular military parts numbers and custom configurations for specific applications. From standard Mil-Spec configurations to custom designs, we have the Micro-D, subminiature and ultra-miniature coaxial, and cylindrical connectors to meet your need, whether it is to build-to-print assemblies, or total turn-key assembly program management. With a sixty-year heritage of leadership in precision design and manufacturing.

NANONICS CONNECTORS

Ultra-compact and weight-saving two-row nanominiature rectangular connector qualified to MIL-DTL-32139 specifications



MTC CONNECTORS

MTC product line is a complete modular connector system consisting of lightweight, environmentally sealed miniature rectangular connectors (shell housings with removable inserts) and individually removable rear-release contacts.

Umbilical Connectors



PUSH PULL - GPL JC2 CONNECTORS

TE's MIL-DTL-26482 Standard Series II bayonet connector is miniature, circular with quick disconnect bayonet coupling. It is also known as DEUTSCH AFD Series Connector, is widely used on applications requiring a general-purpose, miniature cylindrical bayonet connector.



MIL-DTL-38999 SERIES IV CONNECTORS

Resistant to interfering signals, DEUTSCH DIV Series Connectors are designed and built using the superior breech lock coupling mechanism. Special grounding fingers form a 360-degree circle just inside the shell, acting as a shield. The connector is actually grounded when the shells meet, even before the contacts engage





DBAS SERIES 7 AND 9 CONNECTORS

TE Connectivity (TE)'s DEUTSCH DBAS series push pull connectors are designed for severe environmental areas in aeronautic, military and space applications such as rocket launch pads. The DBAS 7 and DBAS 9 series connectors are also ideal for rack & panel equipments. Thanks to their visual and sensitive push-pull locking system, the DBAS 7 and DBAS 9 series connectors are highly reliable. The wide range of inserts, shell types and accessories with multiple surfacefinishing options makes integrated solutions for custom

HERMETICS CONNECTORS

TE's extensive offering of MIL-DTL-26482 standard, series I and II hermetic connectors provide a high degree of performance in harsh environments. With more than 55 years of experience in hermetics manufacturing, TE offers a wide variety of connectors for many applications. Our experienced engineers and vertically-integrated manufacturing teams are ready to design and build special custom hermetics as needed. Hermetic termination styles include solder cups, eyelets, PC tails, weld tabs and crimp termination.

RF Connectors GPL E25



RF COAX CONNECTORS

As one of the leading manufacturers of RF connectors, cable, and cable assemblies, TE provides a wide range of coaxial connectors, including military-qualified SMA, BNC, and TNC connectors, along with a portfolio of small-form-factor high-frequency connectors.



SMA/SSMA CONNECTORS

SMA connectors qualified to MIL-PRF-39012 are available in a broad range of standard configurations with 18 GHz operation. The SSMA series threaded connectors were designed to a size compatible with a smaller diameter semi-rigid cable. SSMA series allows operation to 38.0 GHz.

High Speed Board Connectors (for Larger Missiles)



MULTIGIG RT (COPPER AND OPTICAL MODULES)

TE's board-level interconnects give high performance in harsh applications - with higher connector densities and support for RF and optical backplane interconnects.



STRADA WHISPER HIGH SPEED BACKPLANE

STRADA Whisper backplane family was designed for highperformance, high-bandwidth systems. Its revolutionary design transfer data up to 112 Gbps - allowing you to achieve efficent futue system upgrades without costly backplane or midplane redesigns.

Power Switching



MIDRANGE RELAYS AND DRI

Our portfolio includes relays for TO-5, 1/6th, 1/5 size (.150 grid), 1/2 size crystal can, full-size 2, 5, 10, and 25 amp devices, which are generally hermetically sealed allowing for contaminate-free operation. Our portfolio includes mil-spec solid state relays (SSRs) MIL-qualified to specs like M28750 and M28776, which can address similar electrical and environmental conditions as our electromechanical relays. Our relays portfolio includes CII low-signal and mid-range relays and HARTMAN AC and DC relays.

T05 RELAYS

TE's CII brand of TO-5 low signal relays are miniature hermetically sealed, and non-latching. High frequency models are capable of switching up through 6 GHz.



SOLID STATE RELAYS

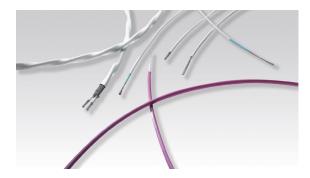
Various models have switch ratings from 90 mA up to 100 A and 270 Vdc. Most are qualified to MIL-PRF-28750D. AC, DC and bidirectional output available.



1/5 SIZE RELAYS

TE's CII brand of 1/5 crystal can relays are hermetically sealed with terminals arranged on .150" grid. Non-latching and latch designs are available.

Cable



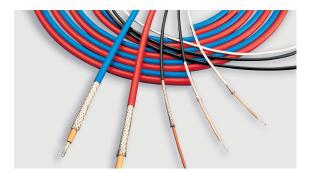
55 CABLE - GPL 914

TE's military-qualified, high-performance primary wire and cable provide size and weight savings with outstanding chemical resistance. They also feature excellent flexibility, abrasion and cut-through resistance, and an extended temperature range from -65°C to +200°C



GENERAL MULTICORE - GPL 728

Power, data, and signal in the same cable. Every year, we custom design and build several thousand high-performance, multicore/multiconductor cables to meet unique product needs. We select from our extensive range of highperformance cable components and jacket combinations to offer solutions which can improve electrical and mechanical performance and reduce size and weight.



CONTROLLED ELECTRICAL CABLE - GPL 586

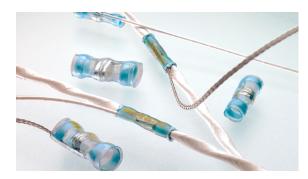
Cheminax cables bring tightly controlled electrical characteristics to miniature coaxial cable - offering electrical performance exceeding standard RG cables in a smaller lighter design, while providing lower attenuation and capacitance



DATA BUS HARNESSES - GPL 593

Custom harnesses built to your drawing specifications are also available. Pre-tested, factory built harnesses provide quick, easy installation and eliminate unnecessary splices and connectors, reducing cost and increasing network reliability.

EPS Products



SOLDER SLEEVES - GPL 584

TE Connectivity's SolderSleeve shield grounding terminators provide an environmentally sealed, insulated and encapsulated solder connection for a variety of applications with temperatures ranging from -65°C to 200°C.



TFIT POLYMER MOLDED - GPL 731

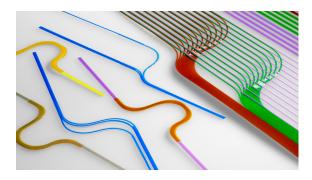
Our portfolio of Raychem heat-shrinkable harness sealing components are engineered to protect in a wide range of applications. Whether your challenge is size, weight, extreme temperatures, or harsh environments, our heat shrink molded shapes are designed to address your design requirements.



TUBING ELASTOMERS - GPL 652

TE's brand of Raychem tubings are made of polyolefins, fluoropolymers, and elastomers enhanced by radiation crosslinking and heat-shrinkability. When heated during installation, our tubings shrink to conform to virtually any shape. They provide dependable insulation, mechanical protection, and strain relief.

Optical Products



OPTICAL FLEX CABLE

TE Connectivity has long been one of the industry leaders in fiber optics and our newly released Optical Flex adds to our family of fiber optic capabilities. Fiber Optical Flex Circuit's optical flex circuit assemblies were developed with the design engineer In mind. They can be utilized for card to card or backplane applications and offer the designer multiple options in cable assembly design, connectorization, and routing.

OPTICAL FIBER

TE's ruggedized fiber optics brings the benefits of optical technology to challenging environments providing more bandwidth, more distance, and more performance. Our offering includes Ethernet and other fast communications protocols with the capacity to handle next-generation 40G and 100G when you are ready without the severe distance limitations of copper cables. Optical cables also offer significant size and weight savings to help meet SWaP goals.



NOTES

Empower Engineers to Solve Problems, Moving the World Forward.

AMP | AGASTAT | CII | DEUTSCH | DRI | HARTMAN | KILOVAC MICRODOT | NANONICS | POLAMCO | Raychem | SEACON

CONNECT WITH US

We make it easy to connect with our experts and are ready to provide all the support you need. Visit **te.com/support** to chat with a Product Information Specialist.

QUALITY STARTS WITH THE RIGHT APPLICATION TOOLING

Creating a quality crimp connection is essential to delivering high performance and reliability in extreme environments. From low to high volume wire processing, TE has you covered with a full range of application tooling and a global field service team.

- · View all application tooling
- · Connect with our experts to find the right tool for your application

te.com/missile-defense

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