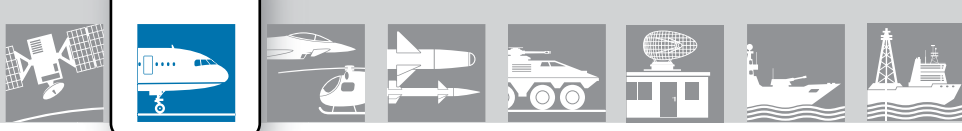




Avionics Solutions for Commercial Aerospace



EVERY CONNECTION COUNTS



**PERFORMANCE ON BOARD:
END-TO-END CONNECTIVITY**

Whether you are looking for better packaging solutions inside the box, sturdy and lightweight enclosures, or high-performance I/O to connect your systems, count on TE Connectivity (TE) for a comprehensive range of solutions.

Today's sophisticated networked aircraft require avionics with the bandwidth to ensure monitoring and control of all flight systems—while offering the size and weight reductions needed to increase efficiency. We can help you keep pace with the higher densities and increased capabilities of electronic systems.

With Integrated Modular Avionics offering new levels of networked sophistication and capabilities, we can help you build the connectivity system to realize its full potential.

At TE, we can help you design and build avionics systems with connectivity solutions that:

- Save weight with advanced materials
- Reduce space requirements with smaller, space-efficient components
- Increase bandwidth with high-speed connectivity
- Decrease complexity with integrated solutions
- Enhance signal integrity with EMI and filter products
- Achieve robust, reliable systems



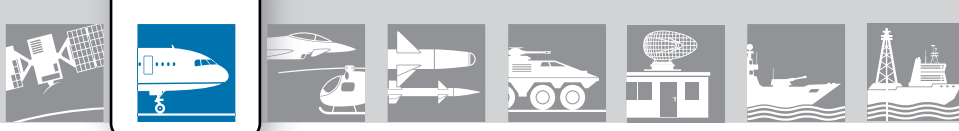
TE Components . . . TE Technology . . . TE Know-how . . .
AMP | Agastat | CII | Hartman | Kilovac | Microdot | Nanonics | Raychem | Rochester | DEUTSCH

Get your product to market faster with a smarter, better solution.

Go to: DesignSmarterFaster.com.
Your best place to get started, today!

Here you can get connected to the inner circle of TE AD&M's best thinkers. Working together early in your design review process, we can help you reach a better connectivity solution.





ENCLOSURES AND ADVANCED PACKAGING



Composite Enclosures

Weight-Saving Rugged Performance

- Light weight – up to 50% lighter than aluminum
- Extremely rugged and corrosion resistant

Customizable

- Conductive composites and plating options for grounding/EMI shielding
- Highly customizable with integrated wire traces, antennas, and connectors



Antennas

Low-Profile, Form-Fitting Conformal Designs

- Multiband and wideband antennas and arrays
- Rugged embedded antennas in engineered composite enclosures

Cost Effective

- Customized designs with integrated RF and DC traces, cables, and connectors

BACKPLANE AND BOARD-TO-BOARD CONNECTORS



Z-PACK 2 mm HM Connectors

Modular High-Speed Performance

- Modular units in 4, 5, 8, and 12-row configurations
- Open-pin-field connector supporting 2.5 Gb/s data rates

Industry-Standard Configurations

- Versions for VME64 Extensions and CompactPCI
- IEC 917-2-2 and IEC 61076-4-101



Fortis Zd Connectors

High Speed

- 12+ Gb/s data rates

Rugged

- Extreme mechanical and electrical performance

Versatile Application

- Modular, with plastic, shielded, and machined metal shells



MezaloK Mezzanine Connectors (VITA 61)

Compatible

- 114-position, compatible with XMC footprint
- 60-position, half-size versions

Reliable

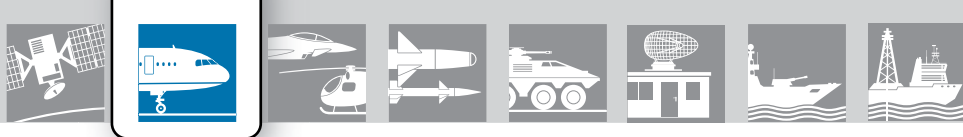
- Mini-box contacts provide 4 points of contact
- LCP plastic housings for excellent thermal stability



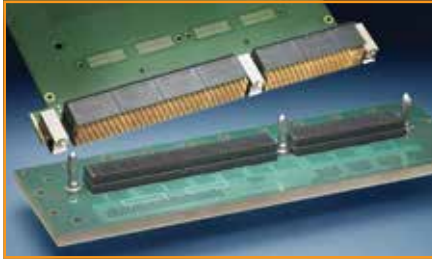
1 mm Free Height Connectors

Space Saving

- High-density packaging on 1.0 mm centerline spacing
- Board stacking heights available from 8 to 15 mm
- Used in IEEE 1386 PMC applications



BACKPLANE AND BOARD-TO-BOARD CONNECTORS



MULTIGIG RT 2-R Connectors (VITA 41 VXS/VITA 46 VPX)

High Speed

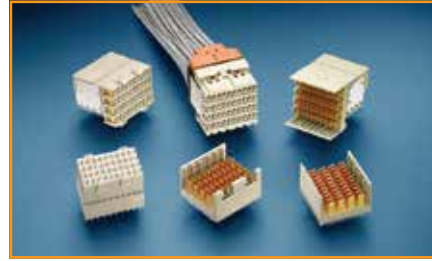
- Data rates up to 10 Gb/s

High-Density Modular Design

- Up to 56 high-speed lines per cm of board space
- Configurable for differential, single-ended, RF, optical, and power

Ultra-Rugged Modular Design

- Meets VITA 72



Z-PACK HM-Zd Connectors

High Speed

- Designed for differential signals at rates up to 12 Gb/s Modular
- 25.00 mm standard module
- 2, 3, or 4 contact pairs per column

Solderless Application

- Vertical and right-angle press-fit pin headers and receptacles

RACK-AND-PANEL CONNECTORS



ARINC 404 and 600 Connectors

Versatile I/O for LRUs and LRMs

- Signal, Quadrx, RF, power, and optical (ARINC 801 and mini expanded beam)
- Blindmate
- Rugged, high pin count

HIGH-SPEED NETWORKING



CeeLok FAS-T Connectors

Compact 10 GbE Performance

- Compact Size 8 shell for space and weight savings

Rugged

- Excellent shock, vibration, temperature, and sealing performance

Convenient

- Field terminable, with integral backshell for low cost, low-weight strain relief, and EMI protection



GPR Connectors

Compact I/O for LRUs and LRMs

- Use 2 to 3x less space than circular connectors

Flexible

- Signal, Quadrx, RF, optical, power
- Various blindmate and latching designs



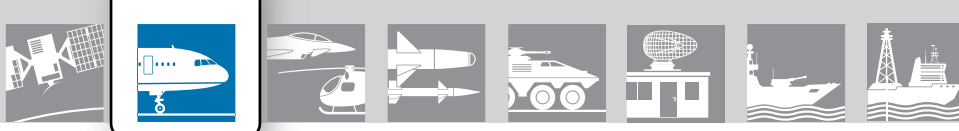
Quadrx Connectors, Contacts, and Cable

High Density, High Speed

- Up to 10 Gb/s (over Cat 6A cable)
- 2 differential pairs in a size 8 contact shell

Compatible

- Inserts for many popular aerospace connectors



RACK-AND-PANEL CONNECTORS



Next-Generation ARINC Connectors

Lower Cost

- Monoblock insert and stamped-and-formed contacts
- Applied-cost savings with solderless, press-fit PCB contact

Lower Weight

- Up to 10% weight reduction per connector

ARINC Qualified

- Meet ARINC 600 performance requirements

HIGH-SPEED NETWORKING



CeeLok FAS-X Connectors

High Speed

- Supports 10G Ethernet and beyond
- One or four 10G Ethernet channels in Size 11 or 25 shells

Compatible

- AS39029 contacts
- Fast field termination and repair, using standard tools
- Available with aluminum or composite shells with a variety of finishes

HIGH-DENSITY CONNECTORS



Nanominiature Connectors

Extreme Weight and Space Savings

- Rectangular, coax, and sealed circular configurations

Robust

- Excellent shock and vibration resistance
- Wide temperature range (-200°C to +200°C)



Wildcat Connectors

Lightweight and Space Saving

- Wildcat 38999 connectors: almost twice the contact density of MIL-DTL-38999 connectors
- Wildcat Micro connectors: Extreme temperature, vibration, fluid, and corrosion resistance in a microminiature connector



Micro-D Connectors

Space-Saving Performance

- Pre-wired per MIL-DTL-83513 or crimp contacts for customization
- Lightweight aluminum shells plated in nickel or cadmium



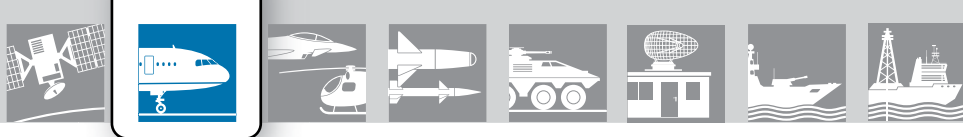
369 Series Connectors

Low-Cost, Space-Saving Design

- Based on ARINC 809/EN4165
- 3, 6, or 9 positions

Reliable

- Fully sealed cable and mating interface
- Aerospace-grade low-smoke and -toxicity materials



HIGH-DENSITY CONNECTORS



DMC-M Series Multi-Module EN4165 Connectors

Compact Flexibility

- Interchangeable modules for signal and power
- Wide range of configurations, backshells, and accessories for signal and power
- Standard and shielded versions

FIBER-OPTIC CONNECTORS



Optical Inserts

Full Range of Connector Solutions

- ARINC, GPR, DMC-M, EN4165, and 38999
- Support for ceramic ferrules, expanded beam termini, and MT ferrules



EN4165/ARINC 809 Connectors

Save Weight, Control EMI

- Wide range of modules for signal and power
- Excellent EMI performance
- Robust composite shell saves weight



PRO-BEAM Expanded-Beam Connectors

Robust

- Physically noncontacting mating of SMF and MMF

Versatile

- Three sizes: Senior, Junior, and Mini
- Size 16 termini also available



Subminiature-D Connectors

Versatility for I/O and Production Breaks

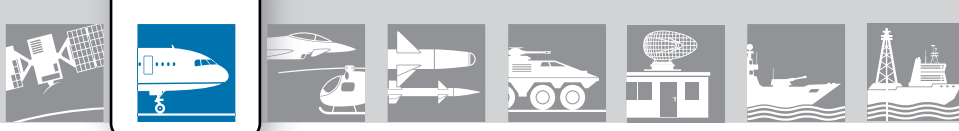
- Ultra-light version—up to 20% lighter with improved EMI performance
- Standard and high-density configurations
- Hybrid versions for coax, Quadrx, and optical



MC Series Physical Contact Connectors

Sustained High Performance

- Withstands a wide range of environmental conditions
- Compact 1.25-mm precision zirconia ceramic ferrules
- Extensive range with dimple termination process and tooling



FIBER-OPTIC CONNECTORS



VITA 66.1 Connectors

Rugged

- Robust performance in backplane interconnects
- Locating posts for proper positioning

High Capacity

- One or two MT ferrules to accommodate up to 24 fibers



Optical Termini

Full High-Performance Range

- 1.25- and 2.5-mm precision ceramic ferrules
- MT array ferrules
- Expanded beam

RF AND HIGH-SPEED DIGITAL



RF Connectors, Cable, and Cable Assemblies

More Choice, More Performance

- Standard, subminiature, and microminiature interfaces and frequencies
- Flexible and semi-rigid cable
- Qualified to MIL-PRF-39012, MIL-DTL-83517, MIL-PRF-55339



Digital Cable Assemblies

More Speed, Less Weight

- Support for high-speed protocols
- Compact, lightweight designs
- Fully tested and characterized by TE

HIGH-SPEED CABLE



Fiber-Optic Cable

Complete Selection

- Single mode and multimode
- Tight-buffered and loose-tube constructions
- Low-smoke, zero-halogen versions for increased safety



High-Speed Copper Cable

Rugged Choices

- Material choices to match application requirements
- Shielded and unshielded
- Low-smoke, zero-halogen versions for increased safety

High-Speed Protocols

- Configurations to support various Ethernet, Quadrx, IEEE 1394, USB, Fibre Channel, etc.

FOR MORE INFORMATION

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Consult TE for the latest dimensions and design specifications.



EVERY CONNECTION COUNTS