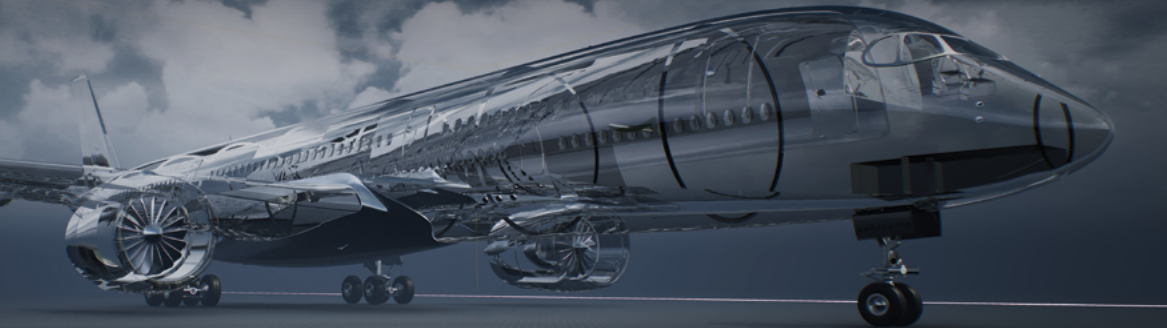




# FAST TRACK TO THE CONNECTED AIRCRAFT

SENSE IT. CONNECT IT. MAKE IT HAPPEN.



**Interconnect & System Solutions  
for Military and Commercial Aerospace**

# Enabling The Connected Aircraft

**TE Components . . . TE Technology . . . TE Know-how . . .**

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

Empower Engineers to Solve Problems, Moving the World Forward.

## Designing the Connected Aircraft for Smarter, Faster Connectivity

**Connect It . . . Sense It . . . Make it Happen**

TE Connectivity (TE) designs and builds electronic interconnect solutions with components, technology, and know-how that help get your product or application to market faster—applications that are critical to the operation of today's connected aircraft. Designed-in technology that optimizes power utilization while saving space and weight. Think TE for dependable performance under extreme temperatures, vibration, and chemical exposure.

### **Size and Weight Reduction**

- Lightweight Materials, Including High-Performance Composites
- Miniaturization
- Increased Design Flexibility

### **Complexity Reduction**

- Integrated Subassemblies

### **Signal Integrity**

- Increased Speed and Bandwidth
- Electromagnetic Interference (EMI) Protection
- Active and Passive Fiber Optics

### **Reliability**

- Lightning Protection
- Clean, Reliable Power
- Mechanical and Environmental Robustness

### **Power Distribution and Control**

### **Sensor Solutions**

- High Reliability, Harsh Environment Sensors; AS9100 Certified
- Force, Temperature, Potentiometric Position Sensors for Commercial Aerospace
- Energy Saving: Satellite Panel and Batteries ESA / NASA Temperature Sensor

# IFE and Cabin Systems



## Space and Weight-Saving Technology for Cabin Interiors and IFE

High-speed copper and fiber bandwidth supports in-flight entertainment distribution and control, web access, automated galley systems, and networking. Our interconnection solutions are qualified to standards such as ARINC 664, 800P2, 810, and 832 and EN4165 and GAIN and 4GCN. Fiber optics and size-reduced interconnects from TE help you achieve the right combination of performance, flexibility and Internet of Things (IoT) capabilities, while meeting your size, weight and power goals.

### TE Solutions for Cabin Interiors and IFE

#### Connectors

- DEUTSCH EN4165 and ARINC 800P2 Connectors
- CeeLok FAS-X Connectors
- High-Speed Fiber-Optic Connectors
- 369 Connector

#### Wire and Cable

- Cat 6a High-Speed Copper Cables
- Custom Multicore Cables
- Coaxial, Triaxial, and Quadaxial Cable
- Fiber Optic Cable

#### Networking

- CANbus Networking
- WiFi Connection Readiness

#### Sensors

- Galley and HVAC Temperature Sensors
- Cockpit Instruments High Reliability Potentiometer-Position Sensor
- Cockpit Pilot Control and Force Sensor Feedback (Pitch Yaw, Roll, Active Joystick)



DEUTSCH DMC-M  
Modular Connectors



DEUTSCH 369 Series Connectors



Raychem Cat 6a Cable



Position Sensor

# Advanced Avionics



## TE Performance on Board:

### Distributed, Integrated Modular Avionics Packaging . . . Miniaturized

To ensure optimal monitoring and control of all flight systems, TE supports high-performance avionics with rugged high-speed backplane connectors for embedded computing. Copper and fiber I/O connectivity supports a wide range of speeds, protocols, and transmission distances.

### Avionics Packaging Size Reduced 40%

To help enable distributed avionics systems, our ARINC 836A standardized MiniMRP packaging can help save weight, reduce package size by 40%, and help increase design flexibility by putting intelligence closer to the action.

### Solutions for Avionics

#### Connectors

- Next-Generation ARINC 600 Connectors
- DEUTSCH DMC-M Connectors
- Fortis Zd Connectors
- CeeLok FAS-T and CeeLok FAS-X 10 GbE Connectors
- Fiber Optic I/O Connectors
- Microminiature and Nanominiature Connectors

#### Relays and Circuit Protection

- Signal-Level and Solid-State Relays
- Power Control Assemblies

#### Wire and Cable

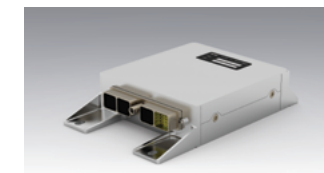
- Cat 6a High-Speed Copper Cable
- Coaxial, Triaxial, Quadaxial Cable
- High-Frequency Filtering-Effect Wire
- Fiber Optic Cable

#### Sensor

- Compact Multi Channel Force Sensor That Can Be Integrated into Active Joystick



MiniMRP Distributed Avionics



MiniMRP Modular Avionics—ARINC 836A



MiniMRP Rackable Enclosures and Latching Mechanisms



Force Sensor

# Engines and Power Distribution



## Rugged, Repeatable Power Management . . . Survivability in Harsh Environments

### Designed for High Vibration and Wide Temperature Ranges

TE has extensive expertise in developing high-reliability connectors, wire and cable, and power distribution solutions, contactors and relays, that support commercial and military requirements.

### Solutions for Wings, Landing Gear, and Engines

#### Connectors

- Hermetic Connectors
- High-Temperature, Vibration-Resistant Circular Connectors
- POLAMCO Connectors and Backshells

#### Contactors

- HARTMAN Primary Power Lightweight Contactors
- KILOVAC High Voltage Contactors
- Smart Sensing ELCU Contactors
- Integrated Power Distribution Units
- HARTMAN K-Series Lightweight Contactors

#### Harnessing and Accessories

- Raychem System 200 Harnessing Components
- Raychem SolderSleeve Grounding Terminations
- Raychem SHF-260 Power Cables
- COPALUM Lite Terminals and Splices
- Custom Power Distribution Panels
- Raychem SPEC 55 Wire and Cable
- DEUTSCH Firewall Feedthroughs

#### Sensors

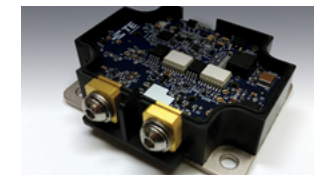
- High Thermocouple Sensor for Exhaust Gas Temperature
- Rotor Track and Balance Accelerometers
- Health and Usage Monitoring Systems (HUMS) Accelerometers



DEUTSCH 983 Series  
Engine Connectors - EN2997



HARTMAN K-Series Lightweight  
AC and DC Contactors



Solid State Controller



Thermalcouple Sensor

# Interconnections and Harnessing



## Harness the Expertise of TE for Advanced Capabilities

### Reduced Weight Increases Fuel Efficiency

Significant space and weight savings are possible with our thin-wall cables, rectangular and circular composite connectors, and optical interconnects. Partnering with TE enables airframe design engineers to solve for grounding and EMI protection, and build out a tailored Current Return Network (CRN) solution for traditional and composite airframes.

### Harnessing, Grounding and Value Add Solutions

#### Connectors

- Power Connectors
- Vibration-Resistant Connectors
- FMJ Series Junction Blocks
- CTJ Series Terminal Junction Modules
- COPALUM, PIDG and STRATO-THERM Terminations and Splices

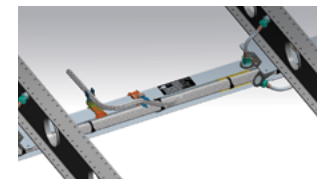
#### Harnessing

- HARNWARE Harness Design Software
- Harsh-Environment Harnesses
- Heat Shrinkable Components for Sealed Harness Assemblies
- Bulkhead Feedthroughs
- Shield Terminations
- Raychem INSTALITE Braid
- Raychem SolderSleeve Grounding Terminations
- DMB Series Grounding Modules

#### Wire, Cable and Accessories

- High-Temperature and High-Performance Wire and Cable
- Controlled Electrical Cables and Composite Cable Clamps
- Sensors, Monitors, and Ground Fault Interrupters

**EWIS . . . Aerospace Industry Standards Qualified . . . Harness Solutions**



Flexible Modular Cable Management



Sealed Harness



INSTALITE Lightweight Braid

## LET'S CONNECT

We make it easy to connect with our experts and are ready to provide all the support you need. Just call your local support number or visit [www.te.com/industrial](http://www.te.com/industrial) to chat with a Product Information Specialist.

## Technical Support

[te.com/support-center](http://te.com/support-center)

North America	+1 800 522 6752	Asia Pacific	+86 400 820 6015
North America (Toll)	+1 717 986 7777	Japan	+81 044 844 8180
EMEA/South Africa	+800 0440 5100	Australia	+61 2 9554 2695
EMEA (Toll)	+31 73 624 6999	New Zealand	+64 (0) 9 634 4580
India (Toll-Free)	+800 440 5100		

# [te.com/ConnectedAircraft](http://te.com/ConnectedAircraft)

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Consult TE for the latest dimensions and design specifications.

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