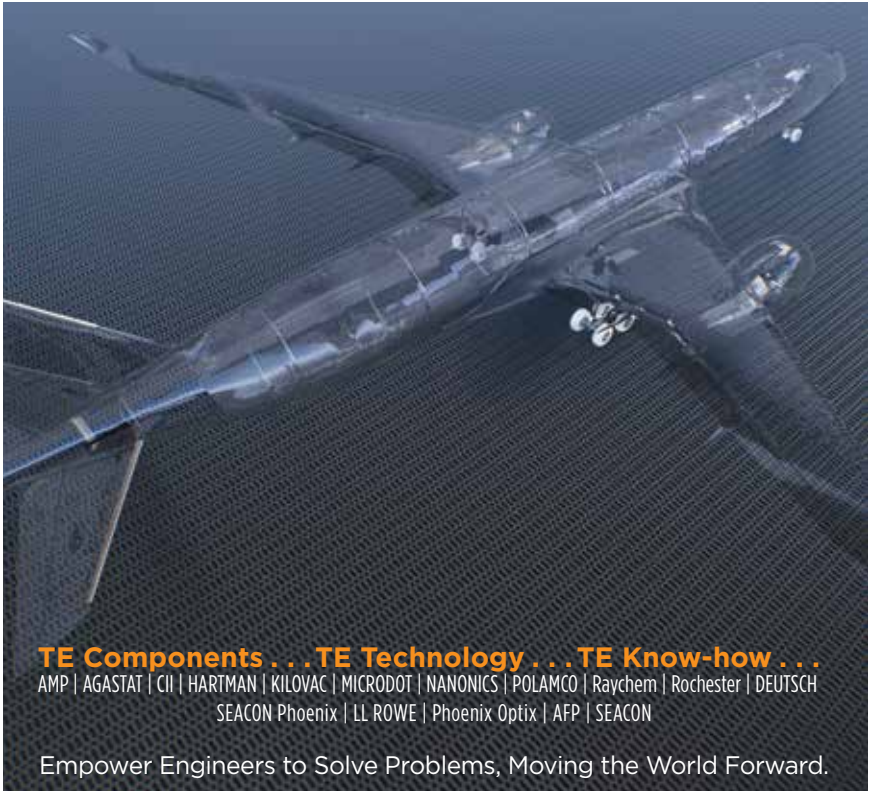




# Enabling the Connected Aircraft

Interconnect System Solutions  
for Military and Commercial Aerospace

# The Connected Aircraft



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

AMP | AGASTAT | CII | HARTMAN | KILOVAC | MICRODOT | NANONICS | POLAMCO | Raychem | Rochester | DEUTSCH  
SEACON Phoenix | LL ROWE | Phoenix Optix | AFP | SEACON

Empower Engineers to Solve Problems, Moving the World Forward.

# Designing the Connected Aircraft for Smarter, Faster Connectivity

## Connect It . . . Sense It . . . Make it Happen

Work with TE Connectivity (TE) to help solve your connectivity and design challenges. By partnering with your engineering team early in the design review process, together we'll align the full power of TE's thought leadership and subject matter expertise to your project goals. We'll help you optimize your system architecture design with solutions incorporating best-in-class products that will help you achieve:

### **Size and Weight Reduction**

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

### **Complexity Reduction**

- Integrated Subassemblies

### **Signal Integrity**

- Increased 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**

# 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, 809, 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 809 Connectors
- CeeLok FAS-X Connectors
- High-Speed Fiber-Optic Connectors
- Galley Insert (GAIN) Connectors

#### 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



DEUTSCH DMC-M  
Modular Connectors



DEUTSCH 369 Series Connectors



Raychem Cat 6a Cable

# 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 836 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



MiniMRP Modular  
Distributed Avionics



ARINC 600 Connectors



Composite Enclosures

# 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 that and provides support to help stand up to the stresses of flight.

### 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



DEUTSCH 983 Series  
Engine Connectors - EN2997



HARTMAN K-Series Lightweight  
AC and DC Contactors



Solid State Controller

# 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
- 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](http://www.te.com) 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/theconnectedaircraft](http://te.com/theconnectedaircraft)

369, AGASTAT, AMP, CeeLok FAS-T, CeeLok FAS-X, CII, COPALUM, DEUTSCH, Fortis Zd, HARNWARE, HARTMAN, INSTALITE, KILOVAC, LL ROWE, MICRODOT, MULTIGIG RT, NANONICS, PIDG, POLAMCO, Raychem, Rochester, SEACON, SolderSleeve, SPEC 55, STRATO-THERM, TE, TE Connectivity and the TE connectivity (logo) are trademarks of the TE Connectivity Corporation. Other products, logos, and company names mentioned herein may be trademarks of their respective owners.

While TE Connectivity (TE) has made every reasonable effort to ensure the accuracy of the information herein, nothing herein constitutes any guarantee that such information is error-free, or any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. The TE entity issuing this publication reserves the right to make any adjustments to the information contained herein at any time without notice. All implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose are expressly disclaimed. The dimensions herein are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice.

Consult TE for the latest dimensions and design specifications.

© 2017 TE Connectivity Corporation All Rights Reserved.

05/17