



Solutions for Commercial Aerospace



FASTER, SMARTER CONNECTIVITY FOR MORE INTELLIGENT AIRCRAFT

Solutions for Avionics

- ARINC Connectors
- Backshells (EMI and Strain Relief)
- Board Connectors
- Circuit Breakers
- Coaxial, Triaxial, Quadrxial Cable and Connectors
- Fiber Optic Products
- High-Frequency Filtering-Effect Wire
- Identification Labels
- Micro and Nano Connectors
- Modular Rectangular Board Connectors
- Rectangular Connectors
- Signal-Level and Solid-State Relays

Solving the Tough Issues

Count on Tyco Electronics for innovative solutions in meeting the challenges of the next generation of flight:

- Weight reduction
- Size reduction
- Complexity reduction
- Increased bandwidth
- EMI protection
- Lightning protection

- Clean, reliable power
- Mechanical and environmental robustness

Higher Bandwidth for Advanced Avionics

In today's electronically sophisticated, networked aircraft, higher bandwidth enables the full capabilities of such sophistication to be realized. We support the

high-speed needs of avionics to ensure optimal monitoring and control of all flight systems with advanced optics, Quadrx connectors and QUADLITE cable, and the next-generation of industry-standard connectors.

Our high-speed backplane connectors support the needs of high-density, high-bandwidth electronics with flexible packaging options, high signal integrity, and a small footprint.



RUGGED OPTICAL INTERCONNECTS



HIGH-SPEED NETWORKING



HIGH-SPEED BACKPLANE CONNECTORS

Optical technology saves weight and space and offers inherent EMI immunity. For high-density applications, the MTC family uses a rectangular geometry that saves space compared to circular connectors and accepts standard ARINC 801 optical termini in a compact, lightweight design. We also offer ruggedized assemblies and expanded-beam connectors for harsh environments.

Our high-speed copper solutions increase aerospace networking performance. Tyco Electronic's Quadrx contacts support 100-ohm Gigabit Ethernet and 150-ohm Fibre Channel. The system includes contacts, QUADLITE cable, and inserts for industry-standard circular and rectangular connectors.

With innovative formats optimized for signal integrity, high density and mechanical and environmental robustness, our backplane/daughtercard connector systems include the ruggedized MULTIGIG RT Extreme connector and the customizable, user-configurable HSR connector. These products perform at data rates up to 10 Gb/s and provide single-ended, differential, power, RF and optics capability.



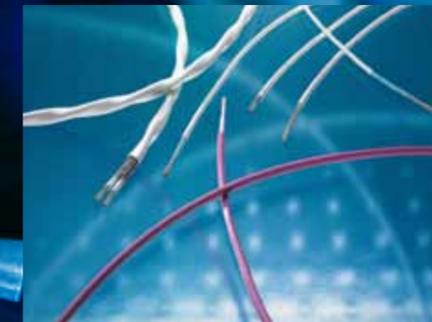
ADD PERFORMANCE FROM SEAT TO GALLEY

Solutions for Cabin Interiors and IFE

- CANbus Networking
- Coaxial, Triaxial, Quadaxial Cable and Connectors
- Custom Multicore Cables
- Fiber-Optic Products
- Galley Insert (GAIN) Connectors
- High-Speed Copper Cables
- Rectangular Connectors
- Subminiature-D Connectors
- Touch Screens
- Wire and Cable



HIGH-PERFORMANCE RELAYS



HOOK-UP WIRE



RECTANGULAR CONNECTORS

Copper or Fiber at Gigabit Speeds

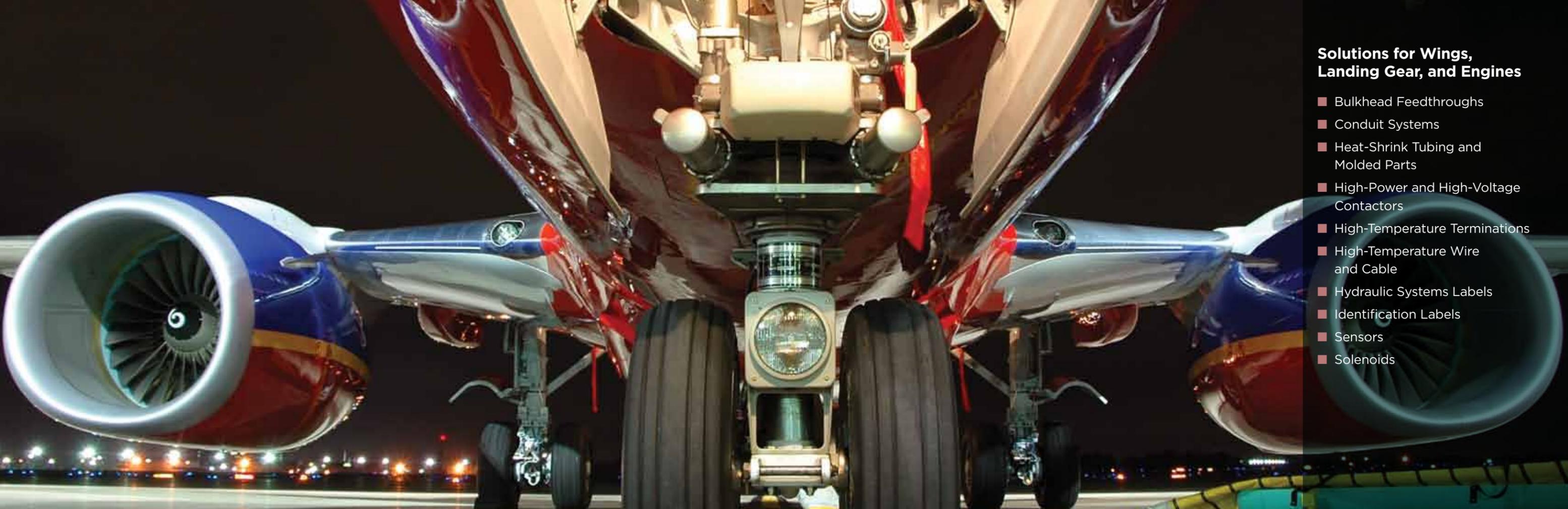
Boost the performance of any cabin with flexible in-flight entertainment, web access, automated galley systems, and high-speed networking. We can provide interconnection solutions based on standards such as ARINC 664 and 810, GAIN, and 4GCN to achieve the right combination of performance and flexibility, allowing cabins to be modularly

configured for passenger convenience and comfort and for greater crew efficiency. Save space, reduce weight and handle tight radii easily with our cable and connectors—designed to install faster, perform better, and increase in-cabin capabilities through plug-and-play of equipment.

Get the relay you need from the broadest line of rugged electromechanical and solid-state relays. The hermetically sealed relays are designed for a variety of demanding applications.

Our flight-ready hook-up wire sets new levels for reduced size and weight in single- and dual-wall constructions. With temperature ratings from -65°C to 200°C, low smoke and corrosive gas generation, and resistance to electrical arc tracking in both dry and wet conditions, our hook-up wire also offers excellent abrasion and cut-through resistance and flexibility.

Our comprehensive range of high-density rectangular connectors gives you the flexibility to meet virtually any interconnection need. Inserts support single-ended and differential signals, optical, power, and RF needs in a wide variety of combinations. Choose from traditional ARINC styles, GPR connectors of galleys, or a range of reduced-footprint microminiature connectors.



Solutions for Wings, Landing Gear, and Engines

- Bulkhead Feedthroughs
- Conduit Systems
- Heat-Shrink Tubing and Molded Parts
- High-Power and High-Voltage Contactors
- High-Temperature Terminations
- High-Temperature Wire and Cable
- Hydraulic Systems Labels
- Identification Labels
- Sensors
- Solenoids

MANAGE DEMANDING ENVIRONMENTAL CONDITIONS

Performance for the Extremes

The demanding environments of engines, landing gear, and wings present challenges in temperature extremes, vibration, mechanical abuse, and potential exposure to hydraulic oils and other fluids. From sealed relays and sensors to rugged wire and cable, you will find products that perform better, install easier, and stand up to the stresses of flight. As traditional hydraulic and

mechanical systems are replaced with sophisticated electronics, you need robust solutions that can withstand the severe conditions of flight while maintaining mechanical and electrical integrity. From initial design stages to aftermarket maintenance and upgrades, we will work with you to increase performance and lower costs.



RUGGED SEALED CABLE ASSEMBLIES



SENSORS



SHF-260 CABLE

Integrated harnesses provide ready-to-install solutions that mean reliability in the toughest application environments. Every assembly meets your requirements for sealing, moisture and chemical resistance, shielding, strain relief, flexibility, and ease of use.

A full range of sensors, from components to custom-made assemblies like the steering feedback sensor pictured above, make use of titanium and carbon fiber to reduce weight and contactless design to withstand the temperature, shock, and vibration of flight.

With a rating of 260°C, SHF-260 highly flexible cable can be bent and routed in extremely tight areas where conventional wire often wrinkles or cracks, and can be used for primary and secondary power distribution where high currents are needed.



RUGGED AND CAPABLE FOR MAXIMUM RELIABILITY

Solutions for Electrical Interconnection Harnesses

- Controlled Electrical Cables
- Harsh-Environment Harnesses
- Heat-Shrink Tubing and Molded Parts
- High-Performance Wire and Cables
- High-Temperature Terminations
- High-Temperature Wire and Cables
- Identification Labels
- Power Terminations
- Terminal Blocks
- Terminals, Splices and Shield Terminations



HEXASHIELD BACKSHELLS



POWER CONTACTORS AND RELAYS



HIGH-TEMPERATURE DEVICES

Reduced Weight Increases Fuel Efficiency

With a large commercial aircraft containing upwards of 350 km of wiring, significant weight savings are possible with our thin-wall cables, composite connectors, and optical interconnects. We put our expertise in materials science to work in creating cables and connectors that are smaller and lighter. Not

only do they save space for easier routing, they open new possibilities for advanced capabilities such as fly by wire. All while giving you the robust mechanical and environmental performance needed.

For superior EMC protection, HexaShield adapters represent a significant improvement over pigtail termination methods by providing 360-degree shielding on the termination area of each individual cable. HexaShield adapters are simple to install, easy to maintain, and dependably resistant to mechanical and environmental stresses.

Our lightweight contactors and relays handle high-power DC and AC needs. They are available hermetically or environmentally sealed, with a variety of electrical configurations, power ratings, voltage ratings, and mounting styles to make your electrical system more reliable and capable.

Tyco Electronics' shield termination devices provide environmentally protected shield termination on cables that are designed for applications requiring a maximum temperature rating of 200°C in the aerospace applications industry.

GET THE TYCO ELECTRONICS ADVANTAGE

Solutions for Power Distribution

- Custom-Engineered Power Distribution Assemblies
- Heat-Shrink Tubing and Molded Parts
- High-Power and High-Voltage Contactors
- High-Temperature Terminations
- High-Temperature Wire and Cables
- Power Terminations

Fly Lighter with Advanced Reliability

Our commitment is to giving you advantages in higher performance, lower costs, and greater efficiencies in designing, building, and maintaining commercial aircraft. Whether it's a corporate jet, a commuter aircraft, or a jumbo jetliner, we are continually innovating to give you the best combination of cost and performance.

Innovation for the Next Generation of Aerospace

We lead the industry in innovation by bringing together expertise in materials, processes, physics, and manufacturing. We use sophisticated computer modeling of the magnetic, thermal, mechanical, and electrical parameters of a design to ensure optimum performance. Then

we engineer the product for easier use, longer reliability, and lower applied cost.

See Our Full Product Lineup

For additional products for the Commercial Aerospace Markets, visit our internet site at: www.tycoelectronics.com/ADM and select Commercial Aerospace from the Market Solutions Gallery.



HIGH-VOLTAGE DC CONTACTORS



CUSTOM POWER DISTRIBUTION UNITS



COPALUM TERMINALS AND SPLICES

Tyco Electronics delivers the switching performance demanded by aerospace and defense applications with our lightweight contactors, which offer continuous current ratings up to 500 A at 900 VDC in very compact sealed packages. Custom-designed, fully qualified main power and high-voltage distribution assemblies are also available.

Count on Tyco Electronics not only for all the pieces, but the expertise to integrate them into packages that are lighter, smaller, and easier to install. Already used on major commercial aerospace platforms, our custom PDUs consolidate multiple contactors, circuit-breakers, sensing and protective devices, and related components into modular packages.

COPALUM products are the proven way to achieve high-reliability terminations of aluminum wire or splicing between copper and aluminum wires without the need for inhibitor agents to break down oxides.

FOR MORE INFORMATION

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Our commitment. Your advantage.