# **CABLE ASSEMBLY & HARNESS** CAPABILITIES

Vertically integrated & fully manufactured for an end-to-end solution to your design challenges.



# **Cable Assembly & Harness Capabilities**

### Why Amphenol CIT Is Your Ideal Cable Assembly and Harness Supply Partner

- » Complete end-to-end manufacturing of assemblies, often with a very broad range of products used within each assembly or harness
- » Customer support and manufacturing (including low-cost) locations around the industrialized world
- » Best-in-class service levels to support our customers
- » Many years of proven experience of designing and manufacturing assemblies and harnesses for customers in Commercial Aerospace, Military Space, Test and Measurement, Medical Technology and Industrial markets
- » Employment of continuous improvement processes in all our facilities in an effort to continually improve all aspects of our business and supplier relationship with our customers
- » End-to-end, full-service provider of solutions to each customer's connectivity challenges and problems

### Amphenol CIT End-to-End Program Management

We can support all your needs as a single local vendor for virtually all types of cable assemblies and harnesses.

- » Assembly design
- » Product lifecycle support
- » Collaborative product engineering
- » Strategic sourcing support
- » Robust change control process
- » Prototyping support



state-of-the-art facilities worldwide.

We partner with customers in the Commercial Aerospace, Military, Space, Test and Measurement, Medical Technology and Industrial markets, providing virtually limitless cable assemblies and harnesses solutions. We work with you to manage complete end-to-end solutions, eliminating the need to manage multiple vendors and helping to ensure your applications deliver on time and on budget.

### **Engineering Support**

Amphenol CIT offers a wide array of engineering experience and capability across all our manufacturing locations worldwide, all of which can be utilized to support design, manufacture and qualification testing of assemblies and harnesses. Our capabilities include:

- » Electrical testing for AC, DC, RF and fiber optic-based products, including EMC
- » Mechanical testing facilities for shock, vibration, crush resistance and flex life
- » Environmental testing
- » Testing to various Mil-Def standards
- » X-ray examination
- » Overmolding capability with in house tooling design and manufacture
- » In-house ability to design and manufacture custom connectors and accessories
- » In-house electrical design services

#### Quality

Amphenol CIT's worldwide manufacturing locations are certified to the latest standards including AS 9100, ISO 9001, ISO 14001 and IPC. Plus, our facilities hold additional customer-specific approvals from many of the world's best-known platform and system OEMs.

- » Fully automated assembly test capabilities (continuity & shorts, Hipot/DWV pinouts)
- » Impedance (characteristic, differential, common mode)
- » Insertion loss, return loss/VSWR
- » High definition video visualization of fiber connector interfaces
- » AS9102 First Article Inspection
- » Advanced fiber optic interferometer testing for precise end face geometry control

#### Logistics

Amphenol CIT provides high levels of service and support from our sales offices and manufacturing locations around the world.

Our service levels often include dedicated project-managed manufacturing cells that can deliver cable assembly and harness products to fit exactly with your specific production schedules.

For many customers, we also stock product components to support particularly complex demands.

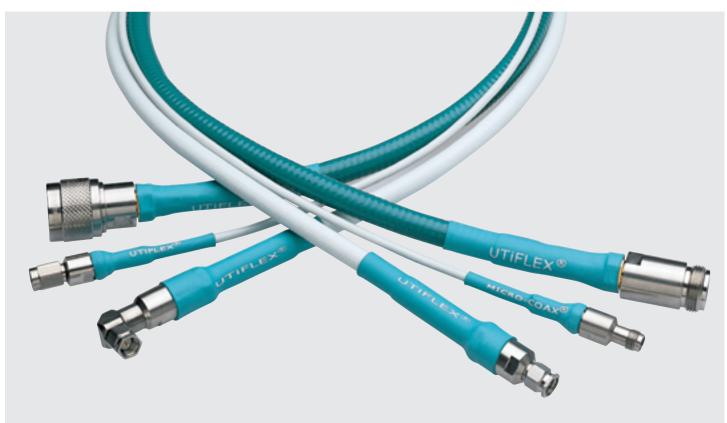


With an exceptional focus on the needs of our customers, Amphenol CIT designs, builds, tests, certifies and delivers comprehensive, high-performance interconnect solutions at our facilities across the globe, with locally managed design and engineering teams at our



## **Cable Assembly & Harness Capabilities**

#### **RF & Microwave Cable Assemblies**



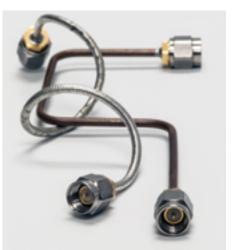
When your applications call for high-performance coaxial cables and connectors, Amphenol CIT's line of high-frequency RF/microwave assemblies are unparalleled.

Amphenol CIT's capability to produce standard and custom RF connectors worldwide and our commitment to end-to-end program management means we can support all your needs as a single local vendor, for virtually every type of RF/microwave cable assembly.

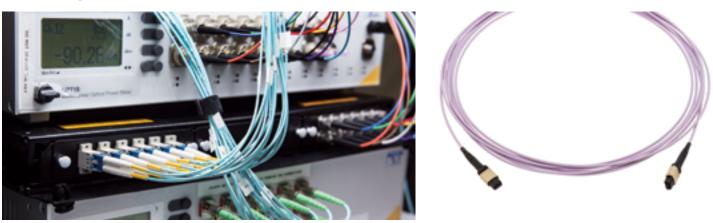
We manufacture a broad range of standard and high-performance products at our facilities around the world, including UTiFLEX® high-performance flexible microwave assemblies, avionics standard RF cables and assemblies, Semi-Flex® (conformable), semi-rigid and industry-standard flexible RG-series (QPL listed) coaxial cables that meet or exceed MIL-DTL-17 specifications.

We specialize in phase, amplitude and delay-matched assemblies, and all assemblies are individually tested to ensure 100% compliance with your specifications.

If your applications involve test and measurement cable assembly needs, we engineer a complete line of customizable, high-frequency RF test cables and assemblies, including single-position, ganged and high-frequency interconnects.



#### **Fiber Optic Cable Assemblies**



Because stable and reliable optical performance is essential, You can rely on our fiber optic assemblies to perform when the Amphenol CIT delivers mission-critical fiber optic assemblies for cable is exposed or submitted to temperature extremes, high use in harsh Commercial Aerospace, Military, Space, Industrial levels of shock, vibration or mechanical stresses. and Test and Measurement environments.

Our teams of engineers in our state-of-the-art facilities around Amphenol CIT specializes in the design and manufacturing of wire the world can work with you on a complete end-to-end solution and cable assemblies and harnesses, integrating aerospace and to ensure that throughout the process of design, build, test and space-grade cabling with fiber optic technology as needed for certification, our fiber optic assemblies are in complete compliance your applications. with your specifications and work first time, every time.

#### **Cable Harnesses**



No matter how complex and stringent your application needs are, Amphenol CIT engineers work to keep overall cable harness design simple and effective.

We work with you to custom design, manufacture, test and certify cable harnesses from the small, simple and straightforward to highly complex, multi-branch configurations that can include a combination of features including overbraided sections, screened

- branches, overmolded connector boots or complex hybrid designs utilizing a mix of signal, power cables, RF cables and even fiber optics.
- We have local design and engineering teams at our state-of-the-art manufacturing facilities worldwide, and are ready to work with you on complete, end-to-end managed solutions for your application needs.

## We Are Interconnect.

At Amphenol CIT, we do more than make interconnect technologies for a spectrum of industries. We deliver the critical connections and products that make amazing performances possible.

# Global Manufacturing. Local Support.

Wherever you are, so are we. With manufacturing centers around the globe, our highly qualified team is up to any challenge. Our extensive worldwide manufacturing capabilities, coupled with end-to-end local project management and engineering support, allow us to design, build, test, and certify your product in-house, saving you the time and hassle of managing multiple vendors.



#### **Key Continuous Improvement Efforts**

- » Employee Engagement
- » Policy Deployment
- » Value Transition Planning
- » Managing for Daily Improvement
- » Enterprise-wide Lean Sigma
- » Variation Reduction
- » Supply Chain Excellence
- » Engineering Excellence

### **Our Family of Brands**

The Continuous Improvement System (CIS) serves as the driving force behind our sustained growth, excellence, and longevity. It forms the foundation of our commitment to continual enhancement and sustainability. Through CIS, we steer our strategic evolution, achieve annual cost efficiencies, and ensure alignment between business objectives and operational excellence.

At its core, CIS functions as our universal compass, fostering a shared language and transparent methodologies. It provides the framework to set the course for progress and equips us with actionable metrics to measure our journey. With CIS, we manage improvement systematically, ensuring timely resolution of challenges and nurturing a culture of stewardship and sustainability.

In essence, CIS embodies our ethos of relentless improvement, offering the structure and tools necessary to navigate the complexities of our evolving landscape while remaining true to our core values.

#### **Key Sustainability Efforts**

- » Sustainability Initiatives: Targeting waste and emission reductions for Amphenol CIT, customers, and the environment.
- » **ISO 14001 Compliance:** Adhering to environmental standards, identifying and reducing waste and emissions.
- » ISO 50001 Energy Management: Optimizing energy usage, transitioning to greener energy sources, and identifying energy conservation measures.
- » Reduce, Recycle, Reuse: Implementing strategies to minimize waste and promote resource conservation.





#### FACILITIES CERTIFICATIONS



Visit our website to view certifications listed by site.

#### **PRODUCT CERTIFICATIONS**



Contact us directly for products engineered to your specific compliance needs.

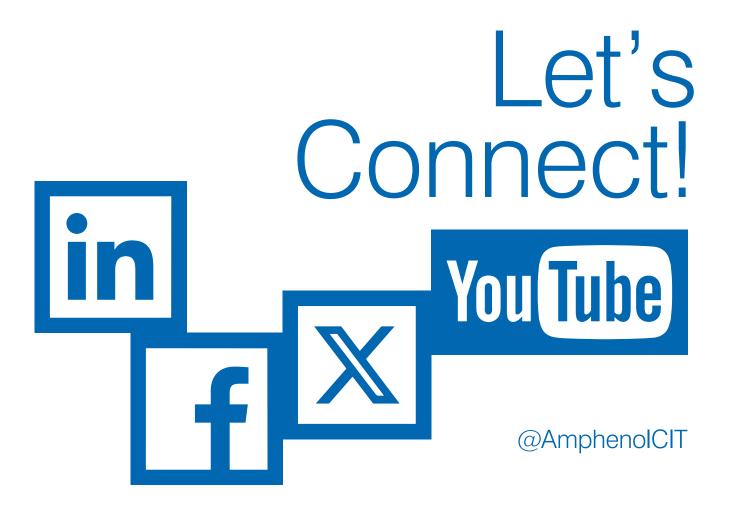


#### **HEADQUARTERS**

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