



## Cable and Wire Harnesses for Your Critical Mission



The Federal Prison Industries (FPI) Electronics Business Group produces technically advanced, mission-critical electronic products and components. Our cable assemblies and wire harnesses are used around the world in U.S. tactical aircraft and ground vehicles, smart weapons, and secure communications systems. We specialize in producing unique, top-quality electronic products

where reliability is essential and the manufacturing process is not easily automated. We create multiple high-strand conductors with numerous twist configurations and shields of various constructions through our in-house braiding technology. Our skills include working with a wide range of conductor alloys, gauges, insulation, and jacket components.



## Why Choose UNICOR

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- **Proven Experience** – Over 60 years' experience in producing reliable, rugged cable assemblies for applications where shock, vibration and shielding are required.
- **Preferred Provider Status** – preferred provider of cable assemblies and wire harnesses to the U.S. Armed Forces, government agencies and military OEMs. Our surge capacity, on-time delivery, focus on quality, and customized service helps to meet combat needs overseas and increased security requirements at home.
- **Full Range Services** – One-stop shopping for cable assembly and wire harness needs—from CAD and prototyping services through production and distribution.
- **Quality Assured**
  - Precision made products manufactured in a statistical process control (SPC) and ISO9001:2015 environment.
  - 100% inspected and 100% guaranteed to meet the most demanding military and commercial specifications.
- **On-time Delivery & Production Capacity** – Nationwide production facilities fully-equipped and staffed to handle all cable assembly and wire harness needs, from simple to complex, including immediate production capacity, and the flexibility to meet accelerated delivery schedules.
- **Unmatched Customer Service** – Customized distribution networks across the U.S. and abroad.
- **Competitive Pricing** – Highly competitive prices, plus, our extensive knowledge of federal government procedures, make your procurement process easy and convenient.





## Demanding Environments Demand High Performance Cable Assemblies

### **Aircraft Cable Assemblies**

Our aircraft cable assemblies are used in hundreds of applications, including Cobra helicopters, F16 combat jets, new aircraft upfitting, and refurbishing aircraft already in use.

### **Coaxial Cable Assemblies**

Our coaxial cable assemblies are built to provide safe, secure, and reliable transmission of voice, video, or data in demanding environments. Plus, we produce both flexible and semi-rigid coaxial cables that require a great deal of precision and care in the manufacturing process.

### **Power Distribution Systems and Cables**

Our skilled technicians configure electric power distribution systems, including circuit breaker enclosures, lighting fixtures, floodlight systems, cable and fiber optic assemblies and connectors. We also manufacture heavy-duty, rugged electric power and distribution cables in many lengths and conductor sizes, that are resistant to abrasion, chemicals, and wide temperature fluctuations – ideal for running heavy equipment, large-scale outdoor lighting needs, and supplying power to military and civilian field operations.

### **EMI and EMP-Hardened Cables and Assemblies**

Our EMI cable assemblies – found in command posts, power control units, smart weapons, radar, military radios, and wireless antennas, as well as aircraft navigation equipment. Their design protects sensitive equipment and electrical circuits from electromagnetic interference. We also produce technologically advanced EMP-hardened cables that meet stringent military/aerospace requirements. These products mitigate the effects of EMP on mission-critical command centers, military vehicles, missiles, naval vessels, and avionics, navigation and communication equipment, worldwide.



### **Fiber Optic Cables and Assemblies**

Our fiber optic cables and assemblies meet the fast-growing need for high-performance interconnections between increasingly sophisticated, high-speed equipment. We manufacture a broad spectrum of high-reliability, multi-strand fiber optic cable assemblies in single- and multi-mode using military-qualified components.

### **Grounding Cable Assemblies**

Our complete line of aircraft grounding cable assemblies is designed to meet demanding military specifications for proper grounding during maintenance and refueling. Uses include unloading fuel to operating portable handsets, wireless base stations and power amplifiers.

### **Re-manufactured and Re-engineered Cable Assemblies**

Quick turnaround is possible on remanufactured cable assemblies, making a labor-intensive process timely and cost-effective. In addition, we re-manufacture cable assemblies and re-engineer and custom-manufacture cable assemblies for equipment no longer in production.

### **Security Camera and Speaker Cable Assemblies**

Our security camera cable assemblies save time and effort in security camera installation on military, federal, and commercial locations. They also allow users to link audio-visual amplifiers and connect security cameras to several monitors. They are ideal for use in closed-circuit television applications.

Through our broad technical skills in braiding EMI/RFI-shielded cables, we produce speaker cable assemblies that minimize crosstalk between connectors and maintain signal strength. Our cables are available in single-conductor, 2-conductor, and high conductivity cables.

## High-Quality Minature Wire Subassemblies to Large Complex Wire Harnesses

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### **Aircraft Harness Assemblies**

Our high-performance aircraft harness assemblies are constructed to be flame-retardant, chemical-resistant, and shielded against EMI, RFI and EMP emissions, and are used for operating and controlling virtually all parts of an aircraft, including Cobra helicopters and fighter jets.

### **Electrical Leads and Harness Assemblies**

Our electrical leads and harness assemblies are manufactured for the military, major defense contractors and companies that provide products to federal agencies. They run from the simple to the complex and are available in single- and multi-stranded conductors with numerous twist configurations and different voltage ratings.

### **Communication Harnesses**

Our communication harnesses are found in ground-to-ground, ground-to-air, ship-to-ground and air applications, from tactical aircraft and ground vehicles to Homeland Security vehicles and base stations.





## Making Change Possible

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The Federal Prison Industries program (now operating under the trade name UNICOR) was established in 1934. Eighty years later, the program continues to operate at no cost to taxpayers and benefits communities across the Nation by creating safer prisons and reducing inmate recidivism.

Social responsibility underscores everything we do. By providing a platform of job and life skills training along with work experience, we increase offenders' chances of securing meaningful post-release employment and becoming a contributing member of society.

Research shows that offenders who participate in the UNICOR program are 24% less likely to return to criminal activity and 14% more likely to obtain employment upon release from prison compared to those without similar experience.

UNICOR invests in America by reducing crime, and its costs and consequences. For every dollar spent on correctional industry programs, a substantial amount is saved in future criminal justice costs (e.g., arrests, convictions, incarceration, crime victimization and post-release supervision).

Ultimately, UNICOR helps keep America safe, reduces public assistance costs, and compensates victims of crime. It also supports local businesses via the purchase of raw materials, promotes the viability and health of our communities, and effectively reduces crime's revolving door.

### Contact

A full list of our products is available on request. Federal Prison Industries excels at producing customized products and service solutions to meet your cable assemblies and wire harness requirements. Contact us to see how we can become your number-one source for quality, high-performance, reliable, and rugged cable assemblies, and wire harnesses.

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