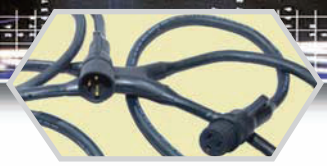
Electronics

Providing Advanced Technologies

Cable & Wire Harnesses



THE FEDERAL PRISON INDUSTRIES 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.

The Electronics Business Group has over 60 years of experience in manufacturing custom and standard cable assemblies and wire harnesses for the most demanding needs. We specialize in producing unique, top-quality electronic products where reliability is essential and the manufacturing process is not easily automated.

Through our in-house braiding technology, we produce multiple, high-strand conductors with numerous twist configurations and shields of various constructions. We are skilled at working with a wide range of conductor alloys, gauges, insulation and jacket components.

Proven Experience

>>> The Electronics Business Group has significant experience in producing reliable, rugged cable assemblies for applications where shock, vibration and shielding are required.

Preferred Provider Status

>>> The Electronics Business Group is a 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

>>> We provide one-stop shopping for cable assembly and wire harness needs—from CAD and prototyping services through production and distribution. We can customize our range of services to meet your needs.

100% Guarantee

>>> Our precision-made products are manufactured in a Statistical Process Control (SPC) and ISO9001:2000 environment. All cable assemblies and wire harnesses are 100% inspected and 100% guaranteed to meet the most demanding military and commercial specifications.

On-time Delivery & Production Capacity

>>> The Federal Prison Industries nationwide production facilities are fully equipped and staffed to handle all of your cable assembly and wire harness needs, from simple to complex. We can provide you with immediate production capacity, and have the flexibility to meet accelerated delivery schedules.

Unmatched Customer Service

>>> The Electronics Business Group has an established customized distribution network for home and overseas. Our unmatched attention to quality and customer service ensures that our products are available where, when and how you need them.

Competitive Pricing

>>> Prices for our precision cable assemblies and wire harnesses are very competitive. Because of our extensive knowledge of federal government procedures, we make your procurement process easy and convenient.

High Performance

Reliable & Rugged

CABLE ASSEMBLIES

Aircraft Cable Assemblies

Our aircraft cable assemblies are used in hundreds of applications, from Cobra helicopters and F16 combat jets. We supply cable assemblies for new aircraft or refurbishing and upfitting aircraft already in use.

Coaxial Cable Assemblies

The Electronics Business Group coaxial cable assemblies are built to provide safe, secure and reliable transmission of voice, video or data in demanding environments. We have the unique capability to produce both flexible and semi-rigid coaxial cables that require great precision and care in the manufacturing process.

Power Distribution Systems and Cables

Our technicians are skilled at configuring 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. These cables are resistant to abrasion, chemicals and wide temperature fluctuations, making them 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

The Electronics Business Group makes EMI cables and assemblies that protect sensitive equipment and electrical circuits from electromagnetic interference. Our EMI cable assemblies are found in command posts, power control units, smart weapons, radar, military radios and wireless antennas as well as aircraft navigation equipment.

We also have the advanced technology to produce EMP-hardened cables that meet stringent military/aerospace requirements. These products are in use worldwide to mitigate the effects of EMP on mission-critical command centers, military vehicles, missiles, naval vessels and avionic, navigation and communication equipment.

Fiber Optic Cables and Assemblies

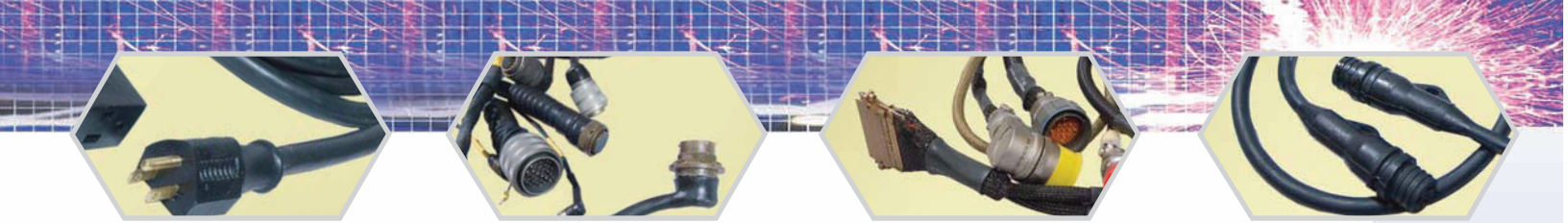
Our fiber optic cables and assemblies meet the fast-growing need for high-performance interconnections between increasingly sophisticated, high-speed equipment. We manufacture a broad spectrum of high-reliability, multi-strand fiber optic cable assemblies in single- and multi-mode using military-qualified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

Grounding Cable Assemblies

We manufacture grounding cable assemblies for use in a variety of applications—from unloading fuel to operating portable handsets, wireless base stations and power amplifiers. We produce a complete line of aircraft grounding cable assemblies that meet demanding military specifications for proper grounding during maintenance and refueling.

Remanufactured and Re-engineered Cable Assemblies

The Electronics Business Group can perform quick turnaround on remanufactured cable assemblies, making this labor-intense process timely and cost-effective. We can re-manufacture cable assemblies quickly and re-engineer and custom-manufacture cable assemblies for equipment that is no longer in production.



Security Camera and Speaker Cable Assemblies
The Electronics Business Group security camera cable assemblies save time and effort in installing security cameras on military, federal agency and commercial locations and allow you to link audio-visual amplifiers and connect security cameras to a number of monitors. They also 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 cross-talk between connectors and maintain signal strength. Our cables are available in single-conductor, 2-conductor and high conductivity cables.

High Quality Miniature Wire Subassemblies to Large Complex Wire Harnesses

WIRE HARNESSES

Aircraft Harness Assemblies
The Electronics Business Group manufactures complex aircraft harness assemblies for operating and controlling virtually all parts of an aircraft and are used in Cobra Helicopters as well as fighter jets. We construct aircraft harness assemblies with high-performance wire and cable that is flame-retardant, chemical-resistant and shielded against EMI, RFI and EMP emissions.

Electrical Leads and Harness Assemblies
We produce electrical leads and harness assemblies for the military, major defense contractors and other companies that provide products to federal agencies. Our leads and harness assemblies 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 and ship-to-ground and air applications, from tactical aircraft and ground vehicles to Homeland Security vehicles and base stations.

Wire Rope Assemblies
Through our in-depth knowledge of cable braiding technology, we produce high-tensile strength coated, galvanized or stainless steel mechanical wire rope assemblies that deploy parachutes, ejection seats, brakes, ailerons and landing gear.

The Electronics Business Group technicians are noted for the exceptional quality of their soldering and armoring techniques to meet most military, industrial and commercial standards. We also produce customized leads with almost any type of connection, and harness assemblies in nearly every configuration.

CONTACT US

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 Federal Prison Industries can become your number-one source for quality, high-performance, reliable and rugged cable assemblies and wire harnesses.

Email: **electronicssales@central.unicor.gov**

U.S. Department of Justice
UNICOR
Federal Prison Industries, Inc.

320 First Street N.W., Building 400, Washington, D.C. 20534
The Electronics Business Group
www.unicor.gov/electronics

FPI-PET
CATME600

Printed on recycled paper