# **Cable Solutions for Tactical Communications**



Amphenol PCD connects people and technology for those who protect us! We are located in Beverly, Massachusetts and we are dedicated to supplying high quality cables to all branches of the military. Our cables are built for all harsh environments and designed to meet and exceed customer expectations. We have close alliances with other Amphenol divisions, enabling us to competitively offer full-turnkey integration of any connector onto a cable assembly. We offer quick-turn prototype services and production programs with short lead-times. Our experienced engineering staff is ready to assist you with any new design effort ranging from connector selection to full cable assembly design. Our facility is ITAR registered and ISO 9001:2008 and AS9100-C certified.

# MIL-C-55116 Military Communications Audio Cable Assemblies



Amphenol Tactical Communications (ATC) Cable Assemblies are designed to be used in harsh environment applications and feature a rugged, watertight two (2) stage molding process. The AP Series Cable Assemblies are provided as finished, turnkey, factory-assembled, molded, cable assemblies. These assemblies are used to interface with all MIL-C-55116 applications such as military radio applications, ruggedized laptops and intercom systems.

# MIL-22992 Class L Heavy Duty Power Cables



Amphenol MIL-22992 Class L assemblies are suited for Industrial and Military applications. These connectors and cable assemblies are designed to meet demands, ranging from 40 to 200 amps, for military shelters, vehicles, and remote power generation.

# **Headset and Soldier Accessory Cables**



Amphenol focuses on connecting soldiers who protect us. We produce soldier-worn and ruggedized tactical communication cable assemblies. Our over mold technology withstands harsh environmental conditions. Our design team works closely with customers to assist them achieve SWAP (Size, Weight, And Power).

# Over-braided Cable Assemblies or Ruggedized Ethernet Cable Assemblies



Amphenol produces over braided cable assemblies for the Military and Commercial Aerospace markets. Braiding material, which improves overall EMI performance, includes Stainless Steel, Tinned Copper, and Aluminum. Braiding materials such as Nylon and Nomex are used for cable jacketing and vary based on operating temperature.

#### **Custom Molded Cables for Harsh Environments**



Amphenol offers high performance injection-molded cable assemblies (PVC, TPU, LSZH, and Polyurethane). Amphenol performs potting and encapsulation with MIL-M 24041 epoxies. Our mold library supports most Amphenol and mil-spec connectors. With vast adhesion studies made on new plating materials, superior over-molding is achieved.

# Ruggedized Ethernet and USB Cables



Amphenol offers high reliability Cat 5e cable and RJF / USB cable assemblies designed both for harsh or industrial environments. Our exterior cable designs consists of a UV resistant, polyurethane, halogen free flame retardant (HFFR) jacket and conductors are doubled shielded with a braid and foil (SFTP). Cat5e cables are designed to ISO/IEC11801 requirements. Our extensive offering of Ethernet, USB, FireWire, and ESATA connectors can be sold as cord sets with molded plugs and / or transversal receptacle sealing.

# AN/PRC 117G and AN/PRC 152 Military Radio Data Connectors



Amphenol Tactical Communication (ATC) connectors and cable assemblies are designed to interface with the AN/PRC-117G and AN/PRC-152 military radio 32 pin data connector. These connectors are used to interface with ruggedized laptops, Intercom systems and FBCB2. ATC connectors are available as field installable connector kits and as factory assembled molded cable assemblies. The ATC connectors are designed to be used in harsh environment applications and feature a rugged, watertight two (2) piece metal shell design. The design includes enhanced EMI-shielding capabilities to insure the superior performance that you would expect from Amphenol.

# **Amphenol**

Amphenol PCD, a division of Amphenol Corporation, designs, manufactures and markets electrical, electronic and fiber optic connectors, connector systems, and cable assemblies. The primary end markets for the Company's products are Commercial Aerospace, Military, and Industrial markets.

#### **Backshells**



Backshells are qualified to AS85049 and provide strain relief, environmental sealing and EMI/RFI shielding. Also RoHS compliant, they are available in aluminum, stainless steel, brass, and composite—and come in various finishes. Different designs (i.e. straight, 45, and 90) are available and customization is always an option.

Applications: Military, Commercial Aerospace, Industrial

### **RJ45 Series**



The RJ45 harsh environment Ethernet connector series supports Ethernet Class D / Cat5e and Class E / Cat. 6 connections in harsh environments. This RJ45 series offers a wide range of solutions including 38999 Series III and 26482 robust metallic shell configurations, manual & self-closing dust cap, backshells, cable assembly units, and various shell finishes.

Applications: Battlefield Communications, Radars, Railways

#### USB 2.0 & 3.0



The harsh environment USB series allows the use of USB 2.0 (up to 480 Mb/s) & soon USB 3.0 (up to 5 Gb/s) ruggedized or standard cordsets for high speed data acquisitions and transmissions in harsh or controlled environments. This USB series offers metallic 38999 Tri-start threaded or spring loaded push pull coupling configurations with manual & self-closing dust cap, backshells, cable assembly units, and various shell finishes.

Applications: Embedded Computers, Tactical Satellites, Data Transfer Units

## **Memory Keys**



The USB 2.0 & 3.0 Memory Key series enables data transfers in the harshest vibration, dust, fluid, and shock environments. This complete data storage solution offers capacities ranging from 2GB to 64GB for 38999 threaded coupling and 2GB to 8GB for ¼ turn coupling. Memory capacities above 32GB are now available in USB 3.0. The USBFTV KEY seals IP68 when mated with the USBFTV receptacle. Full customization and encryption available.

Applications: Flight Recorders, In-flight Testing, Command & Control Equipment

# **Ruggedized Ethernet Switches**



The RJ Switch product line offers complete network solutions with a wide range of harsh environment options, from compact switches for industrial applications to more rugged switches designed to meet military specifications. The rugged switch packaging features compatible RJ Field connectors and are rated for IP68 applications, with operating temperatures from -40°C to +70°C, and optional ATEX Zone 2 compliance. Switches can feature in standard 5, 8, 10 or 24 connection ports and are available in Ethernet Unmanaged, RING and Managed models.

Applications: Factory Automation, Data Acquisition & Transmission, Battlefield Communication, Submarine

# **Low Cost Composite Solutions**



RJF RB, RJF 544 and RJF EZ allow you to use Ethernet Class D/Cat.5e and Class E/Cat.6 connection for 10 BaseT, 100 BaseT or 1000 BaseT networks in harsh and industrial environments. Patented RJ Stop system allows the use of a standard RJ45 cordset within protective composite plugs rated for IP68 environmental protection. Push pull, reverse bayonet, and latch/lever solutions available.

USBField Plastic and Neoprene connectors provide cost affective USB 2.0 solutions that utilize push/pull mating and a patented Self Closing Cap to ensure IP67 protection for mated plugs and Memory Keys and IP54 for receptacles with Self Closing Cap alone. Various cord set and rear terminations are available.

Applications: Telecom Equipment, Video Control, Industrial Process Control Robotics, CNC Machines, GPS Systems

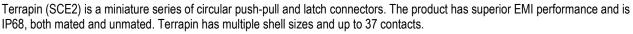
#### **SIMPlus**



SIMPlus is a modular, multifunctional rectangular connector. It consists of shells and modules, which together create an integrated solution, supporting advanced signal and power requirements at a fraction of the space. Its flexibility and simplicity, during design and operation, makes SIMPlus a competitive alternative for a wide range of applications.

Applications: In-Flight Entertainment Systems, Cable Service Systems, Interconnect Systems

## Terrapin—Miniature Circular Series



Applications: Soldier Communications/Military Radios, Harsh Environments

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