Amphenol
INDUSTRIAL PRODUCTS GROUP

INDUSTRIAL@AMPHENOL
TRUSTED GLOBALLY

Smart Building

Smart Building market

At Amphenol we understand Smart Buildings have unique interconnect needs. A smart building uses a variety of technologies, including but not limited to, sensors, actuators, microchips, etc. These technologies, integrated with complementary software, enable a building to be "connected". By being connected, a smart building can adjust its own ecosystem allowing for a reduction in energy consumption, optimize usage of space, provide security, and other functions, all while minimalizing the buildings' environmental impact.

We know smart buildings are an emerging application for new builds or retrofits. Modern residential and industrial facilities will become more reliant on smart building systems to effectively and efficiently operate. The basic needs for power and data feeds to equipment are the basis for any smart building platform. By connectorizing these systems and platforms, installation and maintenance times can be dramatically reduced. The structures all around us are becoming intelligent adaptable organisms connected to a vast network. Amphenol offers the widest selection of robust interconnect products that can complement the future of Smart Buildings.

Amphenol's products withstand:

• Vibration
• Salt Spray
• Humidity
• Dust
• EMI/EMC
• Temperature Extremes

Whether you need power connectors, signal connectors, backplane connectors, rugged data cables and switches, complete cable assemblies, fiber optic connectors and assemblies, or system attachments, we have the right solution for your Smart Building application.

We also know you need a partner with a global footprint of service and support. Amphenol has over 85 facilities in 30 countries and, due to our culture of cost control and operating discipline, we are able to prosper in all economic climates. Amphenol's background in producing high reliability connectors for the harshest environments on Earth and in Space gives us the unique experience needed to produce extremely reliable, cost effective, industry standard products for the Smart Building industry.

If you have the need for a customized solution our engineers will work with yours to produce the right customized interconnects for your application. Amphenol connectors are approved by UL/CSA, VDE and other international standards.

Amphenol

Since 1932 Amphenol has been the interconnect technology provider of choice to industry leading companies throughout the world. With a broad and diverse product portfolio, Amphenol is able to develop the right solutions for our customers across the diverse segments of the rapidly expanding electronics market.

With dedicated employees working at 85+ facilities in more than 30 countries, Amphenol has the unique advantage of having both diversified global reach while still being a focused organization. Our focus comes from our

entrepreneurial management team dedicated to specific markets and regions.

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Signal Solutions

MicroBoss M12

SINE

Amphenol Sine Systems (Sine) microBOSS™ M12 factory molded cordsets provide a space saving and highly reliable sensor connection to withstand harsh environmental conditions and temperatures for a wide range of applications.

Available in standard plug & play or a customizable connectivity solution, the microBOSS™ M12 has key placement in many areas of automation also ideally suited for applications outside of the traditional industries. Offered in 3, 4, 5 pin and RJ45 configurations they deliver signal to a wide variety of devices, utilizing both UL AWM-style 2661 and CSA AWM I/II A/B cable, as well as Flex and High Flex cable options.

Features and Benefits
- 3, 4, 5 & RJ45 availability
- 4A Max Current; 300V Max Voltage; 18-22AWG
- Utilizes both UL AWM-style 2661 and CSA/AWM I/II A/B cable
- Flex and High Flex cable options
- High-performance, cost-effective
- Comparable with existing standard products industry-wide
- IP67 water resistant
- 100% factory tested

Max-M12

AIO

Amphenol Industrial Products Group introduces our ruggedized M12 high speed data connector, the Max-M12. High speed data transmission connection systems have traditionally been implemented into commercial applications with little regard to high vibration, high temperature and overall harsh environment demands. With the increased implementation of these high speed Datalink connection systems into more heavy duty / harsh environment surroundings, the need for a more robust and ruggedized connection system has surfaced.

Features and Benefits
- HDM 12 Versions Available
- Plastic or Metal (for shielding)
- 90° right angle and straight connector offerings
- 3, 4, and 5-way circuit patterns
- A, B, D & P polarity codes – based on IEC 61076-2-101
- Terminals for solder-to-wire or pins for PCB applications
- Available as stand-alone connectors & cable assemblies (standard and overmolded)
- 444 N (100 LBF) pull force on cable
- Backward compatible with IEC 61076-2-101 (M12)
- Extreme environmental testing based on J2839 requirements
- Provisions for overall cable shield or drain wire to the connector plug housing
- SAE J 2839 Compliant
- RoHS Compliant

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Signal Solutions

Micro-B™

Amphenol's new Micro-Bayonet series provides the solution that meets your budget and performance goals. Micro-B meets the requirements of today's electrical equipment for a connector with a small footprint, light in weight, high density insert patterns, exceptional shell-to-shell electrical EMI shielding, and high reliability.

Features and Benefits
- Aluminum shell construction provides high strength while being light in weight
- Stamped and formed crimp contacts, easy for cable assembly
- ¼ turn positive bayonet coupling, quick coupling
- Multiple shell plating options (up to 500H salt spray protection)
- Excellent shell-to-shell EMI shielding
- High shock and high vibration resistance

AIO

Power & Signal Solutions

Amphe-Lite™

The Amphe-Lite™ Connector Series is designed for communications equipment manufacturers with signal, power, RF or fiber optic interconnect requirements in harsh environments such as communication towers, outdoor and roof-top applications. This commercial composite connector series is ideal for communications equipment, manufacturing process control and medical equipment. The Amphe-Lite™ series offers the highest performance capabilities for severe environment applications, yet is cost effective enough for general duty and non-environmental applications.

Features and Benefits
- Nickel Plating
- Unplated Non-Conductive Composite Shell
- Recessed Pins (100% Scoop Proof)
- Integral Interfacial Seal and Grommet bonded to insert
- PC Tails, Coax and FO Contacts Available
- Excellent EMI Shielding (F Class)
- Up to 128 size 22D contacts in one connector

AIO

eco | mate®

In design and conception the Ecomate® program meets the high requirements for applications in industrial technology. Easy operation, reduced dimensions and a more robust design are only a few of the features of the series. The connector's main area of application is in the fields of plant construction and machine building. The connector is used for measuring and controlling applications as well as for power supply technology. The series is comprised of a large selection of housings and shapes and offers models with screw, solder and crimp termination.

Features and Benefits
- Quick and easy assembly
- Screwed cable gland with clamping ring
- Strain relief and mounted gasket all in one component
- Cable housing, straight or angled, for the cable diameter 6 - 12.5 mm
- Robust thread for the screwed cable gland
- Ergonomically designed product range for safe handling
- Pre-loaded ground contact
- Fastening for the protective caps on the housing of the receptacles

SINE

Amphenol
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Power & Signal Solutions

eco | mate® Aquarius™ Waterproof Connectors
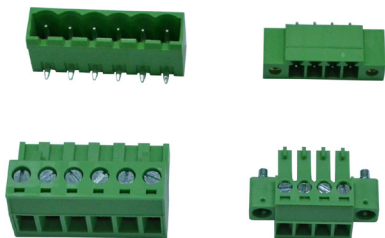
Waterproof dynamic plastic connectors are ideal for harsh environments (IP67/69K in mated condition). Power and signal contacts can be combined in a variety of inserts, providing a highly flexible interconnect solution that reduces system complexity and minimizes installation costs. Quick and reliable mating with tactile feedback assures proper mating.

SINE

Features and Benefits
- Low Profile Plastic Housing
- Bayonet Rapid Coupling System
- 1/3 Turn w Audible/Tactile "Click"
- Sizes 8, 10, 12, 14, 16 and 18
- 27 Insert arrangements
- Wide Ranging Contact System
- Power, Mixed Power & Signal Layouts
- UL94-VO
- Salt Spray = 500 Hours
- Design based on MIL-DTL-26482
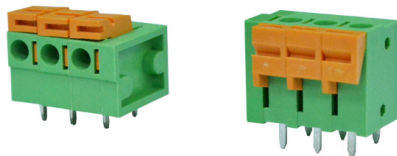- UL ETCB2 & UL ETCB8
- RoHS Compliant

TJ & OQ Series

TJ and OQ Series are purposed for signal transmission or power supply. The screw clamp design of TJ provides reliable contact with wires. Anytek's OQ supports parallel or vertical wiring with PCBs. The OQ Series is also capable of high operating temperatures suitable for THR technology. Customers have the option to choose a flange type that applies to their fixation between TJ and OQ in vibration situation.

ANYTEK

Features and Benefits
- With or without flange design
- 90° or 180° for OQ Series
- High operating temperature for OQ, suitable for THR
- Pitch from 3.5mm to 7.62mm
- Rated current range from 10A to 20A
- Plastic housing using PA66 material meets UL94V-0
- UL Certified

HA Series

HA series is compact in size and is convenient for customers' wiring. Pitch from 2.54mm to 10.0mm provides flexible choose according to customers' design requirement. HA series terminal blocks can be applied in Smart Building, Instruments and the Security industries widely.

ANYTEK

Features and Benefits
- Anti-vibration performance with spring clamp structure
- Lever design can save 40% wiring time
- UL certification
- 90D or 180D wire insert way
- Pitch from 2.54mm to 10.0mm
- Rated voltage/current from 150/2A to 300V/10A
- Plastic housing using PA66 material meet UL94V-0
- Contact: Brass,Tin-plated
- Spring clamp: Stainless steel

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Power & Signal Solutions

LPT Connectors

AIO

The new LPT Series from Amphenol Industrial Operations (AIO) is based on the MIL-C-26482 Series I and Amphenol's original PT Series. A cost effective metal structure connector for all major global signal application markets. The LPT Series is an evolution of AIO's well-known PT connector. Intermateable with 26482 Series I connectors, has the ability to accept wire gauges from 22AWG/0.25mm² to 12 AWG/4.0mm², and an IP67 rating. The LPT series is available in several series, with varying design characteristics and custom options to meet cost considerations and provide maximum design flexibility.

Features and Benefits
- Aluminum shell, light and reliable
- Multiple shell plating options, 500 hours salt spray with Gray ZnNi
- Standard PT shell and coupling nut, intermateable with PT Series
- 3 tines Stamped & Formed crimp contacts
- Accepts wire gauges from 22AWG/0.25mm² to 12 AWG/ 4.0mm²
- Quick positive coupling and 5 key/keyway mating
- High Shock and Vibration resistance
- IP67 Rating (mated condition)
- 500 mating cycles

UPT Connectors

AIO

Amphenol Industrial has expanded its PT Series product line with a new plastic bayonet connector. The UPT provides more options for industrial interconnect markets that do not require a metal shell or Mil-Spec equivalents. Based on the 26482 Series I, UPT is a plastic shell interconnect with a metal bayonet coupling system and crimp contacts. Featuring a light weight design, smaller footprint and easy field installation the UPT is a cost effective industrial connector solution.

Features and Benefits
- Contact Sizes and Arrangements: 12 & 16 Stamped & Formed crimp contacts, three insert arrangements available (16-19, 24-32, & 24-48)
- Intermateable with Souriau TrimTrio, UTO, and ITT Trident Ringlock
- Wall Mount, Jam Nut, and Straight Plug Shell Styles
- Plastic Shell, Light Weight
- Metallic Bayonet Coupling, Molded Ring on Receptacle
- Quick Connect/Disconnect
- Multiple backshell sealing accessories
- RoHS compliant

USB 3.1 Type C

ALTW

ALTW's USB 3.1 Type C is a small and compact reversible plug that supports data transfers up to 10 gigabits per second (Gbps) as well as power at 5A max. Designed with an ingress protection of IP67 and assembly type design O-ring to ensure a smooth mating process. The USB 3.1 Type C is applicable for a wide variety of I/O applications and supports hundreds of protocols to enable your device to work in various network connections.

Features and Benefits
- Assembly type O-ring
- UL 94V0-Molding Type
- Waterproof capacity: IPx7 (unmated)
- TID compliant
- Gen 2 spec
- USB 3.1 is backward compatible with USB 3.0 and USB 2.0
- Faster data transfer rate
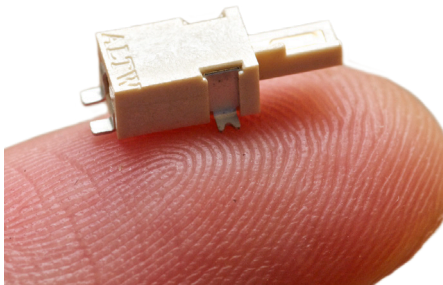
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X-Lok

Amphenol LTW's X-Lok Series connectors are presented in various sizes for power, signal and hybrid applications for fast, simple and reliable connections. Featuring a push lock mechanism for blind mating with audibale and tactile feedback. X-Lok Series provides less mating failure and quicker mating than traditional threaded solutions.

Features and Benefits
- Quick and easy installation
- Push-Lock mechanism
- Ingress Protection (IP68)
- Receptacle, overmolded and field installable (FI) in solder, crimp or screw-in termination
- Power, signal and hybrid applications up to 20A
- UL2238, UL1977 certified
- Available in Mini, Standard, Middle and Large sizes
- Customizable (i.e colors, length, termination)

ALTW

SSL

The SSL Series is a waterproof and non-waterproof connector series developed for LED lighting and non-lighting applications. Its low profile design aims at minimizing and eliminating in-field wiring and reducing labor time, as well as, facilitating any maintenance job.

Features and Benefits
- Wire-to-wire, wire-to-board connections (waterproof) and board-to-board (non-waterproof) options
- Available in-field installable and overmolded with flat or round cables in black (for outdoor use) and white (for indoor use)
- Ingress Protection (IP68)
- Low Profile (compact design for smaller footprints)
- Reliability (positive latching to ensure interconnection, polarization key to prevent mis-mating)
- Current Rating up to 5A, in 2, 4, and 6 pins
- Operating Temperature: -40°C ~ +105°C
- UL1977, UL2238 compliant

ALTW

Accessories
Protective Vents

Amphenol LTW presents protective Vents designed for enclosure protection in various outdoor applications.

Features and Benefits
- Ingress Protection: IP68 (2m/1hrs), IP69K
- High rating for air permeability 550 – 3000ml/min
- Water and oil ingress resistant
- Plastic, metal, and stainless steel types
- Screw thread or snap-in options
- M12 and M6 sizes

ALTW

Business Units

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