B.C.E. ELECTRONICS
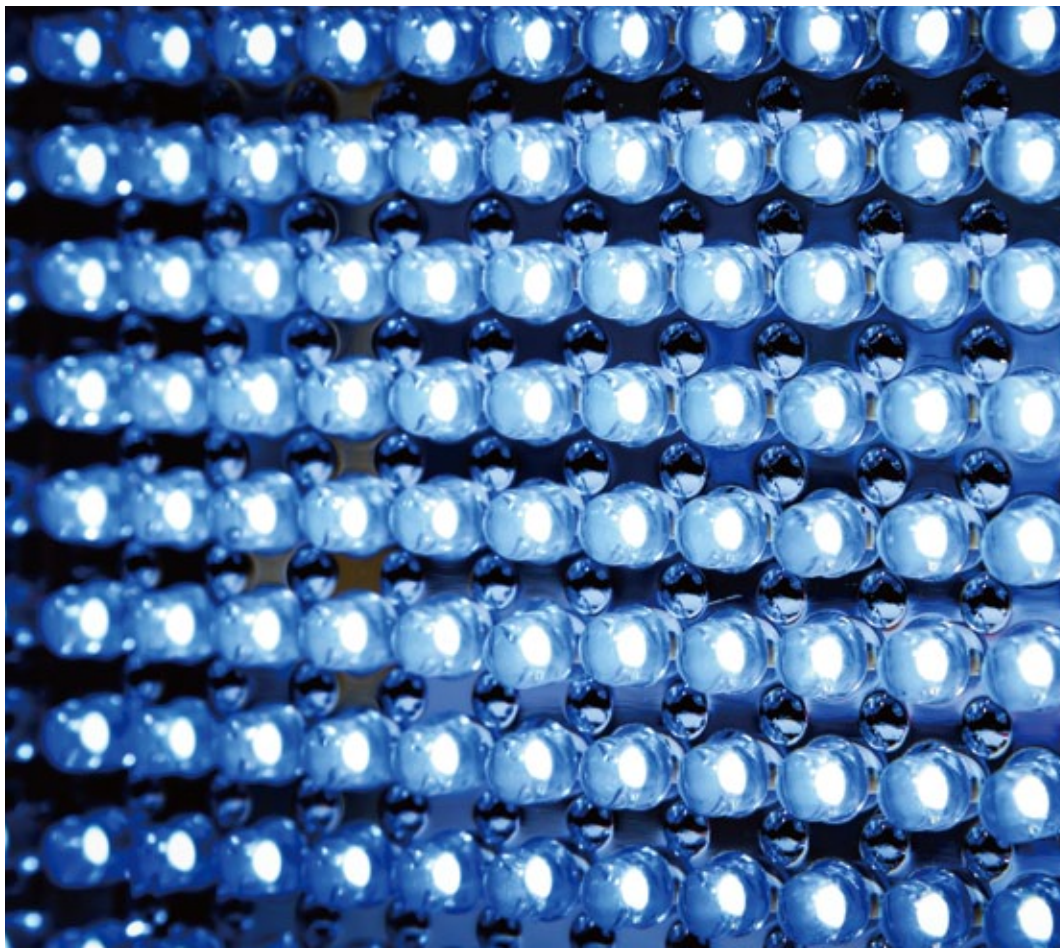
Amphenol LED Market

Innovation in Waterproof Solution

Amphenol LTW

Our History

LTW Technology, established in 1993, is a professional designer and manufacturer of waterproof connectors. In April of 2010, LTW Technology was acquired by Amphenol Group and officially changed its company name to "Amphenol LTW Technology Co., Ltd.".

Amphenol LTW successfully develops high-end waterproof connectors to meet strict requirements for various outdoor and industrial applications; we also have many worldwide patents and certification such as ISO 14001. ISO 9001 and NMEA 2000.

Amphenol LTW is not only a supplier of waterproof connectors but also a solution provider in diversified market segments.

Our Mission

Amphenol LTW is fully committed to fulfill every customer's desire in their interconnection needs. The customized ability and wide-ranging products make us unique from competitors. Furthermore, high standard in product quality and outstanding customer service are to be expected.

- Customized capability for all interconnect solution
- Breakthrough innovation
- High standard in product quality
- Worldwide customer base
- Wide-ranging products for your market segment needs

Amphenol LTW strives to be the world's preferred interconnect solution provider.

LED Market

At Amphenol LTW, we understand the unique interconnect needs of the LED market and its vast application. We know that long life, minimal maintenance, extreme energy efficiency and a sensitivity to moisture in both indoor and harsh outdoor environments are paramount to LED applications.

Whether you need signal connectors, power connectors, hybrid connectors, complete cable assemblies, or a highly customized value-added product, Amphenol has the right solution for your LED application.

Amphenol's connectors and cable assemblies are engineered to work in any environment and to adhere to the strictest international requirements. With IP65 to IP68 waterproof ratings, EMI and UV resistance, UL, CE and/ or

TUV approvals - ALTW's wide array of products can be used for all LED applications.

ALTW's Intelligent Pre-Cabling System and Solutions (IPCS) is your answer for incorporating LED Lighting in tunnels, streets, freeways, highways, retail and commercial buildings, buses, trains, ships, aircrafts, or anywhere. No matter the LED retrofit and/or LED Lighting you intend to use, ALTW's IPCS can solve your need for electrical wiring and cabling infrastructure and help you SAVE 20% to 80% off of your installation time and cost. ALTW's IPCS provides peace of mind, quality workmanship and no power drop which is crucial to LED Light Quality.

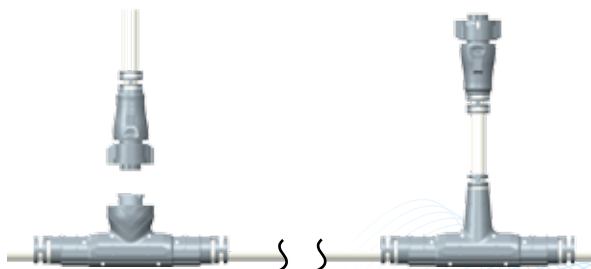Eventually, your total cost of ownership is greatly minimized.

LED Applications

- Architecture Lighting
- LED Display
- Entertainment
- Street lighting
- Parking Lighting

Intelligent Pre-Cabling System Solution

Indoor Solution   **Outdoor Solution (IPX7)**

Trunk cable with receptacle   Trunk cable overmolded with cable   Trunk cable overmolded with cable

- Lighting Control
- Low Voltage DC Grid
- Environmental Control
- Heating, Ventilation & Air Conditioning
- Fire Detection & Alarm
- Escalator & Elevator
- Access Control
- Security

Simple topology but limitless possibilities...

Trunk cable with receptacle

- Various solutions for indoor / outdoor lighting
- Power, data and hybrid applications
- Customized design to save significant installation time and cost
- Suitable for different connectors, cables types, metal / plastic conduits and pipes, etc.
- Distribute safe, low voltage DC power to lighting fixtures, sensors and other electrical devices

- Offer the ability to repurpose and reconfigure without rewiring
- Plug and play modularity
- To meet the control strategies for different parts of the building
- Flexibility for customization to adapt to any kind of network connecting topologies

Product Focus

⭨ X-Lok Connector

- Push lock design for easy and removable installation
- Receptacle, over-molded with cable
- Options from 2 to 18 contacts, 5A to 20A
- IP68 waterproof mated or unmated
- Outdoor rated
- Subject to UL2238
- Operating temperature range -40°C ~ 105°C where applicable
- Sure lock sound feedback to ensure locking

⭨ Circular Connector*

- Screw threaded type, lock bayonet type or push lock type
- Receptacle, receptacle with cable, over-molded with cable & field installable available
- Options from 2 to 31 contacts, 2A to 20A
- Various sizes, over 1000 items, plastic and metal
- Outdoor rated
- Hybrid available
- IP66 / 67 waterproof mated or unmated
- Operating temperature range -40°C ~ 105°C where applicable

⭨ Power Connector*

- Screw threaded or lock bayonet types
- Receptacle, over-molded with cable & field installable
- Options from 2 to 7 contacts, 8A to 30A ; over 110 plastic items
- Outdoor rated / hybrid available
- Operating temperature range -40°C ~ 105°C where applicable
- IP66 / 67 waterproof mated or unmated
- Safety locking with key available (25A & 30A)
- Touch safe (IP2X) available (25A & 30A)

⭨ M Series Sensor Connector

- Available in M8, Guided M8 (G8), M12 (A, B, D, I, S, T and X Codes), Mini (7/8"), M23, and Heavy Duty Shielded Connector
- Available in solder pin, right angle or straight thru-hole pin for PCB application
- Receptacle (with / without wire), over-molded with cable, field installable & distribution box (M8 / M12) available
- Hybrid available (upon request)
- Robust, compact and rugged design available in IP65 / 67 / 68 / 69K, mated or unmated waterproof
- PVC, PUR jackets available for cables (sun, oil resistant & flame rated)
- Operating temperature range -40°C ~ 105°C where applicable
- Meet EtherNet I/P standard
- UL/CSA approved

⭨ RJ Connector*

- Screw thread or lock bayonet types
- Receptacle, overmolded with cable, and field installable available
- Shielded versions
- RJ jack in right angle and straight, terminal block and cable terminated
- Meet industry standards (ODVA, ProfiNet)
- Outdoor rated
- IP67 / 68, mated or unmated waterproof
- Operating temperature range -40°C ~ 105°C where applicable
- Fast connectivity networking in harsh environment

【Note】 Design and specifications are subject to change without notice.

Product Focus

⬊ Vent

- M12*1.5 & M12*1.25
- Screw, screw with nut, snap-in types available
- Air permeability:
  - 260ml/min @70mbar
  - 450ml/min @70mbar
  - 1760ml/min @70mbar

- Water entry pressure: 29kPa / 60kPa
- Outdoor rated ; UL F1-rated materials for excellent UV Resistance
- Operating temperature range -40°C ~ 105°C where applicable
- IP68 / IP69K waterproof

⬊ SSL Series

SSL 1.1 *

- For B-to-B, W-to-B, W-to-W
- Low profile design
- 2P, 4P and 6P available
- SMT receptacle : right angle and straight
- Custom cable assemblies length available upon request
- Single (wire) and dual (flat cable) ended cable assemblies available

- Current rating: 3A (Max.)
- W-to-B / B-to-B locks available for various applications
- High temperature material for reflow processing
- Tape & reel packing for high speed SMT processes
- Cost-effective alternative to hand soldering
- UL 1977 / Lead Free

SSL 1.2

- Low profile
- Current rating: 22 AWG: 3A / 20 AWG: 5A
- Available in 2P and 4P (6P upon request)
- Designed for W-to-B and W-to-W interconnection
- IPX8 waterproof protection

- SMT receptacle, cable assemblies, and field installable available
- Material adopted and packing design for SMT processes
- Polarization key to prevent mismating
- Positive latching to ensure interconnection in various environmental conditions
- UL 1977

SSL 1.3 The Bridge

- Jumper for B-to-B
- Low profile design
- #2.5 screw (not included) used to secure jumper connected to heat sink or base

- Suitable for various LED pitch applications
- Current rating: 5A (Max.)
- UL 1977
- Tube packaged
- Available in 1P

SSL 2.1 Inverted Thru Board

- Card edge connector to connect LED modular board and driver board
- One piece solution for easy operation
- Cost-effective alternative to hand soldering

- High temperature material for reflow processing
- Tape & reel packing for high speed SMT processes
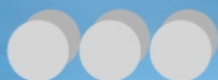- Current rating: 12A (Max.)
- Available in 2P
- ** Mating cable available soon

SSL2.3 EZ-B *

- Simplify the assembly process: Mount to Standard E26/27 directly by screwing
- Accept enclosure thickness up to 3.5mm

- Insert PCB driver to screw base easily; cost-effective alternative to hand soldering
- Current rating: 3A (E26/27)
- UL recognized material