## **Amphenol** COMMUNICATIONS SOLUTIONS

# **Lighting Solutions**

Amphenol is a key provider of lighting connectors compliant with the two dominant standards bodies, NEMA/ANSI and Zhaga, and are used in various lighting applications including exterior lighting, street and area lighting, and interior lighting.



Amphenol BrightConnX

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# Amphenol Overview

Amphenol Communications Solutions (ACS), a division of Amphenol Corporation, is a world leader in interconnect solutions for Communications, Mobile Consumer Products, RF, Optics, Broadband and Commercial electronics markets.

Amphenol Corporation is one of the world's largest designers and manufacturers of electrical, electronic and fiber optic connectors and interconnect systems, antennas, sensors and sensor-based products and coaxial and high-speed specialty cable.

ACS has an expansive global presence in research and development, manufacturing, and sales. We design and manufacture a wide range of innovative connectors as well as cable assemblies for diverse applications including server, storage, data center, mobile, RF, networking, industrial, business equipment and automotive.



## Strong Global Presence

We place heavy emphasis on R&D for both new product and technology development, focusing on the advancement of the next generation of high-speed interconnects and power distribution solutions as well as innovative manufacturing solutions.

 Our R&D centers worldwide have registered thousands of patents and licensing agreements, developing some of the world's first innovations in connectors such as Shield-less High-Speed Connectors, Ball-Grid-Array Attachments, economical Stamped High-Power Contacts and cost effective yet reliable plating processes.



 We relentlessly seek improvements of our products, increasing our solutions' overall cost effectiveness, precision and reliability. This ensures that we meet or even surpass the ever changing needs and expectations of market trends.

## APPLICATION SCOPE



## **Street Lighting**

As a member of the Zhaga Consortium and NEMA/ANSI Committee, Amphenol offers standards-based lighting interconnects for streetlight mounted photocells and other sensors enabling network controlled IoT street lighting and Smart City applications.



## **Interior Lighting**

Amphenol provides Zhaga compliant LED lighting and Wire-to-Wire/Wire-to-Board interconnect solutions for interior lighting supporting digital network control and environmental sensing and management, including Cat5e Power over Ethernet (PoE).



## **Outdoor Lighting**

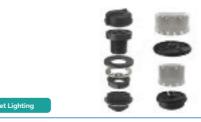
Amphenol offers IP67 sealed interconnect solutions for outdoor LED lighting applications demanding reliable performance and protection from the elements, including ruggedized latching circular cable connectors.

### **Products**



#### ANSI C136.10/41 FLA Series Receptacles & Caps

FLA Series ANSI C136.10/41 receptacles are available in 3, 5 and 7 position fixed and rotatable variants, providing power and dimming/ control signal connections between the luminaire and a mated photocell in commercial street and utility lighting applications. Caps are available for use when a photocell is not mounted to the receptacle.



#### Zhaga Book 18 FLS Series Products

Zhaga Book 18 specifies the street light mounted luminaire receptacles, and the mating bases and domes used for the corresponding photocells and sensor modules needed for Smart City applications. The 4 contacts provide DALI protocol signal, Power and digital I/O connections between the receptacle and the mated sensor.



#### Zhaga Book 20 FLM Series DALI connectors

Zhaga Book 20 specifies the 2 position DALI-2 (Digital Addressable Lighting Interface) connector interface between interior LED lighting control modules and easily replaceable, interchangeable sensors used for presence detection, temperature and air quality sensing and other applications.



## FLH Series Mini Sealed 2.50mm Pitch Connectors and Cables

FLH IP67 sealed, latching wire-to-wire and wire-to-board connectors are available in 3 and 6 position housings providing 2, 3, 4, and 6 contact options in crimp and poke (with separate contacts) for stranded wire, wire poke-in (with embedded contacts) for solid wire, and up to 7A with 18AWG wire, and up to 3A with 22 AWH wire. Ideal for lighting and other applications in Harsh environments requiring a waterproof interface.



Street Lighting

#### ANSI C136.10/41 FLB Series Bases & Domes

FBA Series ANSI C136.10/41 bases and domes form the foundational interconnect platform for manufacturers of photocells, sensors and communication modules used in commercial street lighting and utility applications.



#### Street Lighting

#### **FLK Series Knife Switch**

KNIFE SWITCH PROVIDES A SAFETY DISCONNECT FOR STREET LIGHT LUMINAIRES

Knife Switch connectors are designed to automatically disconnect the internal wiring from the main supply inside the street lighting fixture when it is opened for servicing. This will help the technicians to safely repair, clean and maintain luminaire. Knife switches consist mating Plugs and Receptacles and are available in 3 position, single wire entry style..



#### Interior Lighting

#### FLT Series SMD Terminal Block

FLT TERMINAL BLOCKS PROVIDE DISCRETE WIRE CONNECTION TO A PCB

Amphenol's FLT Terminal Block is a surface mount device for discrete wire connection to a PCB for LED Modules and other applications. They provide easy, secure push-in connections compatible with a range of wire gauges.



Outdoor Lighting

## Rugged MRD Series Circular Locking Connectors and Cables

MRD Series IP67 latching cable-to-cable and cable-to-panel circular connectors are available in 2 shell sizes with 2 to 9 positions, providing a tough mating interface for the harshest applications. All plastic, or plastic and metal housings feature metal thumb release latching for positive mating with an audible click for latching assurance.



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