

Amphenol
COMMUNICATIONS SOLUTIONS



Power Solutions for e-Mobility

Discover the power of Amphenol ePwr™ connectors and cable assemblies. Compact, robust, and cutting-edge, these interconnect solutions are ideal for powering electric 2 and 3-wheelers, offering durable, portable, and energy-efficient solutions.



ePwr™
Amphenol

[amphenol-cs.com](https://www.amphenol-cs.com)



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.

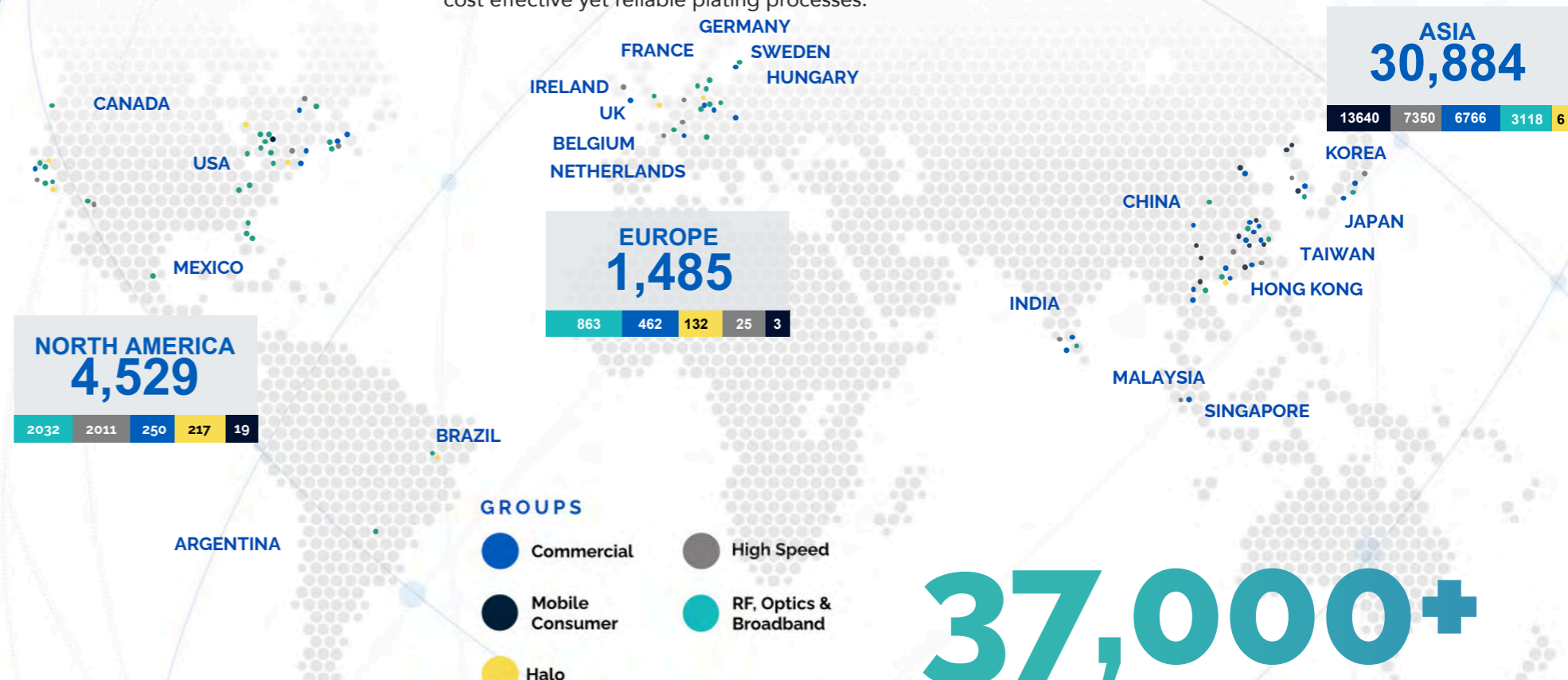
ACS has an expansive global presence in research and development, manufacturing, and sales. We design and manufacture a wide range of innovative connectors as well as cable assemblies for diverse applications including server, storage, data center, mobile, RF, networking, industrial, business equipment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



37,000+

Employees Worldwide

Fixed / Portable Battery-Discharging Connectors

DuraEV™ IPC 50A – 350A EnergyPole

Charging Connectors

DuraEV™ Type 6 Charging Gun

Swappable Battery Connectors

DuraSwap™ Concentric DuraSwap™ Busbar EnergyPole

PDU & Motor

Fixed / Portable Battery Charging and Discharging

In the dynamic field of electric light vehicles (ELVs), battery connectors are crucial for effective charging and discharging. Fixed battery connectors are designed for urban, residential, and commercial installations, offering stable interfaces and durability for frequent usage. These solutions support protocols like CCS and CHAdeMO and are engineered to be weather-resistant and reliable. Portable battery connectors cater to mobile needs, requiring lightweight, robust designs for quick deployment and cross-compatibility with various charging stations. Amphenol provides interconnect solutions prioritizing safety, efficiency, compatibility, and durability for both types, ensuring optimal performance and longevity for ELVs.

Socket Plug IPC PDU Motor EnergyPole

Fixed / Portable Battery Charging and Discharging

Plug Socket Vehicle Inlet Type 6 Charging Gun

Charging connectors

Amphenol ePwr™ charging connector solutions are designed for electric light vehicles to deliver optimal performance and user convenience. They ensure efficient power transfer, compatibility with various vehicle models, and robust safety features. These solutions are engineered for both fixed installations and portable use, supporting rapid charging and seamlessly integrating with existing infrastructure.

Battery Side Connector Vehicle Side Connector

DISCHARGING APPLICATION- BATTERY TO VEHICLE

Swappable Battery

Amphenol innovative swappable battery connectors for electric 2 and 3 wheelers improve urban mobility. They enable quick battery exchanges, reducing downtime and extend vehicle range. Engineered for durability and easy handling, these connectors are scalable and compatible with existing charging infrastructure, promoting sustainable urban and sub-urban transportation.



EnergyPole 200A

- Automatic locking while mating
- Connectors rotate 360° for easy cable routing
- Poka Yoke and touch-proof features
- IP67 compliant & UL 4128
- IEC 61984

EnergyPole 250A

- Automatic locking while mating
- Connectors rotate 360° for easy cable routing
- Poka Yoke and touch-proof features
- IP67 compliant & UL 4128
- IEC 61984

EnergyPole 350A

- Automatic locking while mating
- Connectors rotate 360° for easy cable routing
- Poka Yoke and touch-proof features
- IP67 compliant & UL 4128
- IEC 61984



IPC-M350 Connectors

- Rated up to 325A per 350MCM contact (UL rated currents up to 500A)
- Rated up to 10,000 mating cycles
- UL tested and approved when cross-mated with competitive connectors



Compact Combo Connectors

- 32A max current for power and 5A for signals
- Choice of Power and Signal solutions in Optimum space
- Option for Signal only or Power only
- Adequate creepage and clearance distances for power
- Easy to latch and repair
- Touch proof power
- Multiple wire sizes



Minitek® Pwr Connector and Cable Assembly

- Wire-to-wire and wire-to-board solutions with 2 to 24 positions available
- Current rating from 5A to 28A
- Available in pitch sizes of 3,00mm, 4,20mm, and 5,70mm



EnergyKlip™ EK160

- Rated up to 160A per contact
- IP67 rated option
- Robust latching system



EnergyKlip™ EK350

- Rated up to 350A per contact
- IP67 rated seal
- Robust latching system



IPC-M50 Connectors

- Rated up to 50A per 6AWG contact (UL rated currents up to 120A)
- Rated up to 10,000 mating cycles
- UL tested and approved when cross-mated with competitive connectors



DuraSwap™ Swappable Battery Connectors

- IP67 rated swappable battery connector
- Unidirectional mating
- Provides continuous current of up to 70A and withstands 10,000 mating cycles



DuraSwap™ Concentric

- IP67 rated in mated condition
- Provides continuous current of 100A and withstands 10,000 mating cycles
- Connector mates bidirectional and designed to facilitate solenoid / motorized latching
- Drain hole to prevent water retention



DuraEV™

- 15A up to 70A with 10,000 mating cycles. IP67 rated in both mated and unmated conditions (with IP cap on socket side)
- IP67 rated portable and fixed battery connectors for charging and discharging electric vehicles
- Robust and durable solution



IPC-M120 Connectors

- Rated up to 115A per 2AWG contact
- Rated up to 10,000 mating cycles
- UL tested and approved when cross-mated with competitive connectors



IPC-M175 Connectors

- Rated up to 175A per 1/0 contact
- Rated up to 10,000 mating cycles
- UL tested and approved when cross-mated with competitive connectors



DuraSwap™ Busbar

- Unidirectional mating
- Provides continuous current of 70A and withstands 10,000 mating cycles
- Low profile termination
- IP67 rated in mated condition



Type 6 Charging Gun

- Drain hole to prevent water retention
- Compatible with both fast and normal charging
- First mate last break (FMLB)
- In-built temperature sensor (NTC)
- IEC 62196-6 compliant

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