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***Advanced wire-to-board interconnect solutions enable designers to meet challenging automotive performance requirements...***

## **RUGGED CONNECTORS FROM ERNI DESIGNED FOR AUTOMOTIVE BMS & INVERTERS**

As electric and hybrid vehicles continue to advance in popularity and sophistication, it is essential that system components evolve to meet new design challenges and application requirements. ERNI has an established connector offering that is designed to meet the needs of automotive battery management (BMS) and inverter systems.

There are unique considerations for power connectors associated with the battery management systems and inverters. Advanced wire-to-board connectors enable designers to meet challenging criteria for power-handling, insertion/removal cycles, and mechanical ruggedness under harsh conditions including vibration, stress, and temperature.

The iBridge wire-to-board connector delivers high current density in a miniature package. Featuring a small 2.0mm pitch, the iBridge single-row cable connector system delivers up to 5A per contact at 20°C when paired with an appropriate discrete wire. Despite the small dimensions, the iBridge connector provides secure mating for high vibration applications. The iBridge connector is available up to 12-pins in crimp wire terminations, through-hole solder or SMT terminations for the PCB headers.

The compact single and dual row MaxiBridge™ wire-to-board connector offers a current carrying capacity of up to 12A per contact on a 2.54mm grid for heavy-duty and space-saving connections. ERNI's MaxiBridge connector system incorporates many design and safety features that make it one of the most reliable and rugged connectors in the industry, including primary and secondary contact locking features and multiple colors with unique coding/keying to streamline and ensure proper cable systems integration. Available in vertical and right angle board mount connectors, the new dual row MaxiBridge connector system is

currently offered with 2x5 and 2x10 configurations with new additions (pin counts) being added.

The single row, wire-to-board MiniBridge™ Koshiri connector has a compact, scalable design with a fine 1.27mm pitch. Featuring a unique housing design with distinctive guides that prevent mismating and protect contact pins and a highly reliable active latch that provides significantly higher mating integrity compared to competing technologies, the MiniBridge Koshiri connector system ideally suited for rugged, space saving automotive connections. Offering design flexibility, MiniBridge Koshiri versions are available with 2, 3, 4, 6, 8, 10 and 12 pins, and have a high current carrying capacity extending to 4A per contact depending on the cable plant employed.

For more information

Web: <https://www.erni.com/en/industries/compact-automotive-connectors/battery-management-systems-and-power-electronics/>

Email: [info.usa@erni.com](mailto:info.usa@erni.com)

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### **About ERNI**

ERNI Electronics is a leading global manufacturer and worldwide supplier of a broad line of interconnects for the telecommunications, data communications, computer, industrial, and medical markets. ERNI Electronics GmbH belongs to the international ERNI Group of companies specializing in electrical engineering and electronics. At present, the ERNI Group employs some 650 people, with annual sales of approximately 150 million Euros. ERNI has manufacturing operations in Europe and Asia, as well as sales offices in more than 40 countries. ERNI products are also marketed via a worldwide network of representatives and leading distributors.

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