# **Amphenol**®

## **Application Note**

IAN-107





### ePower-Lite 5.7mm

#### **BACKGROUND**

To extend the ePower-Lite product family by diversifying to meet smaller size and higher current requirements in the EV Market.

Amphenol Industrial Operations (AIO) has developed this next generation product, used for the connection between OBC to PTC or DC-DC due to the integrated model becoming a dominant trend in the EV Market.

#### **PROBLEM**

Within the current EV & HEV Markets the end users are moving to combine OBC & PDU & DC-DC as an integral model. This will allow customers to decrease the amount of connectors needed per application, while also achieving current ratings of up to 120A. The newly developed AIO product provides end users with a competitive advantage over competitor's products.

#### **AIO SOLUTION**

Amphenol Industrial Operations has developed the ePower-Lite 5.7mm to meet the requirements of the integrated model design of the EV Market.

It's a rectangular connector based on the ePower-Lite 3.6mm. Featuring high current carrying capabilities, optional EMI and HVIL, and secondary lock with keyway function which are all benchmarks of the connector series.

The sustained current is up to 120A max and provides two types of wire connections (16mm<sup>2</sup> and 25mm<sup>2</sup>) and a busbar option for the receptacle side.