Amphenol®

Application Note

IAN-69





Helios H4 Panel Connector

BACKGROUND

A solar panel is made up of solar modules daisy chained together through a series of connections. Our H4 Inline connector has been a market leading solution for this type of solar application. Once the modules are linked they can either be fed into an inverter or combiner box. In either situation a wire must be fed into an enclosure. There are two ways to accomplish this task. The panels can either be hardwired into the enclosure which presents longer installation times and inefficient maintenance or the enclosures can be connectorized.

PROBLEM

Current PV wire termination into an enclosure required hardwiring thru a cable gland. An interconnect solution that would allow the harness and the enclosure to be separated was required. Additionally, cable assemblies that were passing thru a hard surface (like a PV module frame) needed to have a means of allowing a simple connection or disconnection to facilitate assembly or device removal.

AIO SOLUTION

The H4 Panel Connector in both male and female configurations provides a proven solution. Hardwire terminations can now be replaced with a simple low cost interconnect option. H4 Panel Connectors can provide a quick disconnection point for separating inverter and combiner box enclosures from DC wires. The use of a mated pair of H4 connectors consisting of a panel and inline interconnect allows for a low cost and easy to install solution. H4 Panel Connectors are UL and TÜV approved and meet NEC 2008 requirements. This economical product pays for itself in faster installations and ease of system maintenance.