# **Amphenol**<sup>®</sup> Application Note



# Helios H4 Branch Connector

#### BACKGROUND

A Solar Array is a grid of individual Photovoltaic modules joined together to produce a desired DC power output. Individual PV module panels producing specified amps and voltages can be joined in various combinations to produce uniform DC power. Connectorization of these interconnects provides an efficient and uniform method for joining panels together.

## PROBLEM

Hardwiring of junction points is a costly and time consuming process for joining individual panels into a collective organization. A uniform method to consolidate panels was required. Additionally, a means to transition from one wire gauge to another to accommodate increasing voltage was desired.

## AIO SOLUTION

The H4 Branch connector in both male/male/female and female/female/male configurations provides a proven solution. Hardwire terminations can now be replaced with a simple , low cost interconnect option. H4 Branch connectors can provide a quick and low cost connection point for joining individual panels into a main line DC power feed. Combined with standard H4 connectors, the Branch connector allows an installer to quickly join both the positive and negative pigtails from a PV module into the main DC feed of a Solar Array. It also provides a transition point by which the cable size may be transitioned to accommodate increased power requirements. H4 Branch connectors are UL and TUV approved and meet NEC 2008 requirements. This economical product provides faster installations and ease of system maintenance.