The ModLink™ Modular Junction Box provides PV panel manufacturers an advanced junction box that enables cutting edge smart technology at no additional cost. Built-in industry standard connectors mate directly to Amphenol Industrial Helios H4 connectors or to a wide range of “Smart” modules. These include DC/DC converters/optimizers, performance monitoring and DC/AC microinverters.

The ModLink Junction Box consists of a base unit that is firmly attached to the back sheet of the panel. The base unit already contains protective diodes and built-in connectors; ready to be used as a basic junction box from the start. When it’s time to upgrade just disconnect the connectors, snap-in the smart module, reconnect the connectors and you’re done.

This modular technology provides instant plug-and-play versatility. Smart modules can be added (or removed) at any time without any additional materials needed or wasted.

The base module retains the basic junction box functionality and protection, no matter if there are smart modules attached or not. This allows for exchange or removal of smart modules if repairs or upgrades are needed, without losing the basic function of the PV module.

There is no longer a need for “pigtails” attached to the photovoltaic module, making manufacturing and handling easier.

The Helios ModLink Modular Junction Box is just one of the many solar solutions Amphenol Industrial has to offer.

**Features:**
- Modular concept; only add what you need, when you need it
- “Future proof”: Ready to accept future smart modules
- Base unit is a complete junction box
- Base unit thermally separated from panel
- Uses industry standard connections
- Plug-and-play; no additional components needed
- No wasted materials when upgrading
- Smart module snaps into base; no drilling, no additional cabling.
- Cost effective on every level: For panel OEM, distributor, installer, owner/operator
- Can be upgraded at any time

**Helios ModLink™ Modular Junction Box Base**

The ModLink™ Modular Junction Box provides PV panel manufacturers an advanced junction box that enables cutting edge smart technology at no additional cost. Built-in industry standard connectors mate directly to Amphenol Industrial Helios H4 connectors or to a wide range of “Smart” modules. These include DC/DC converters/optimizers, performance monitoring and DC/AC microinverters.

The ModLink Junction Box consists of a base unit that is firmly attached to the back sheet of the panel. The base unit already contains protective diodes and built-in connectors; ready to be used as a basic junction box from the start. When it’s time to upgrade just disconnect the connectors, snap-in the smart module, reconnect the connectors and you’re done.

This modular technology provides instant plug-and-play versatility. Smart modules can be added (or removed) at any time without any additional materials needed or wasted.

The base module retains the basic junction box functionality and protection, no matter if there are smart modules attached or not. This allows for exchange or removal of smart modules if repairs or upgrades are needed, without losing the basic function of the PV module.

There is no longer a need for “pigtails” attached to the photovoltaic module, making manufacturing and handling easier.

The Helios ModLink Modular Junction Box is just one of the many solar solutions Amphenol Industrial has to offer.
Helios ModLink™ Modular Junction Box Base

A modular junction box that is just as smart as you need it.

**Technical Data**

<table>
<thead>
<tr>
<th>Terminals</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Termination</td>
<td>Spot Weld</td>
</tr>
<tr>
<td>Termination seal</td>
<td>Potting or Lipseal (optional)</td>
</tr>
<tr>
<td>Bypass diodes</td>
<td>3 low Vf Schottky</td>
</tr>
<tr>
<td>Rated current</td>
<td>15 A</td>
</tr>
<tr>
<td>Rated voltage</td>
<td>UL: 600 V IEC: 1000V</td>
</tr>
<tr>
<td>DC output connection</td>
<td>Built-in Helios H4 Solar Connectors</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-40 °C ... 90 °C</td>
</tr>
<tr>
<td>Protection degree</td>
<td>IP67</td>
</tr>
<tr>
<td>Attachment to backsheet</td>
<td>PSA foam tape or RTV silicon adhesive</td>
</tr>
<tr>
<td>Enclosure material</td>
<td>PPE</td>
</tr>
</tbody>
</table>

For ampT Optimizer Smart Module (DC/DC Converter) please refer to IDS-51

---

**Base Unit Dimensions**

**Installed Module Dimensions**

**Module Installation**

---

**How to order Base Unit**

<table>
<thead>
<tr>
<th>Product line</th>
<th>Product type</th>
<th>Input Terminals and Diodes</th>
<th>Input Terminal Style</th>
<th>Diode Rating</th>
<th>Terminal Area Seal</th>
<th>Vent Diaphragm</th>
<th>Tube Area</th>
<th>Cable Size</th>
<th>PSA Foam Tape Adhesive</th>
<th>Cable Length</th>
<th>Custom Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>HB Helios JB</td>
<td>D ModLink™ Modular Junction Box Base</td>
<td>4 terminals, 3 diodes</td>
<td>F</td>
<td>20A, 100V</td>
<td>A</td>
<td>Potting</td>
<td>N</td>
<td>No</td>
<td>N</td>
<td>No cables supplied</td>
<td>V</td>
</tr>
<tr>
<td>HB Helios JB</td>
<td>D ModLink™ Modular Junction Box Base</td>
<td>4 terminals, 3 diodes</td>
<td>F</td>
<td>20A, 45V</td>
<td>B</td>
<td>O-ring</td>
<td>N</td>
<td>No</td>
<td>N</td>
<td>No cables supplied</td>
<td>N</td>
</tr>
<tr>
<td>HB Helios JB</td>
<td>D ModLink™ Modular Junction Box Base</td>
<td>4 terminals, 3 diodes</td>
<td>F</td>
<td>20A, 45V</td>
<td>B</td>
<td>O-ring</td>
<td>N</td>
<td>No</td>
<td>N</td>
<td>No cables supplied</td>
<td>N</td>
</tr>
<tr>
<td>HB Helios JB</td>
<td>D ModLink™ Modular Junction Box Base</td>
<td>4 terminals, 3 diodes</td>
<td>F</td>
<td>20A, 45V</td>
<td>B</td>
<td>O-ring</td>
<td>N</td>
<td>No</td>
<td>N</td>
<td>No cables supplied</td>
<td>N</td>
</tr>
<tr>
<td>HB Helios JB</td>
<td>D ModLink™ Modular Junction Box Base</td>
<td>4 terminals, 3 diodes</td>
<td>F</td>
<td>20A, 45V</td>
<td>B</td>
<td>O-ring</td>
<td>N</td>
<td>No</td>
<td>N</td>
<td>No cables supplied</td>
<td>N</td>
</tr>
<tr>
<td>HB Helios JB</td>
<td>D ModLink™ Modular Junction Box Base</td>
<td>4 terminals, 3 diodes</td>
<td>F</td>
<td>20A, 45V</td>
<td>B</td>
<td>O-ring</td>
<td>N</td>
<td>No</td>
<td>N</td>
<td>No cables supplied</td>
<td>N</td>
</tr>
<tr>
<td>HB Helios JB</td>
<td>D ModLink™ Modular Junction Box Base</td>
<td>4 terminals, 3 diodes</td>
<td>F</td>
<td>20A, 45V</td>
<td>B</td>
<td>O-ring</td>
<td>N</td>
<td>No</td>
<td>N</td>
<td>No cables supplied</td>
<td>N</td>
</tr>
<tr>
<td>HB Helios JB</td>
<td>D ModLink™ Modular Junction Box Base</td>
<td>4 terminals, 3 diodes</td>
<td>F</td>
<td>20A, 45V</td>
<td>B</td>
<td>O-ring</td>
<td>N</td>
<td>No</td>
<td>N</td>
<td>No cables supplied</td>
<td>N</td>
</tr>
<tr>
<td>HB Helios JB</td>
<td>D ModLink™ Modular Junction Box Base</td>
<td>4 terminals, 3 diodes</td>
<td>F</td>
<td>20A, 45V</td>
<td>B</td>
<td>O-ring</td>
<td>N</td>
<td>No</td>
<td>N</td>
<td>No cables supplied</td>
<td>N</td>
</tr>
<tr>
<td>HB Helios JB</td>
<td>D ModLink™ Modular Junction Box Base</td>
<td>4 terminals, 3 diodes</td>
<td>F</td>
<td>20A, 45V</td>
<td>B</td>
<td>O-ring</td>
<td>N</td>
<td>No</td>
<td>N</td>
<td>No cables supplied</td>
<td>N</td>
</tr>
</tbody>
</table>

**Notice:** Specifications are subject to change without notice. Contact your nearest Amphenol Corporation Sales Office for the latest specifications. All statements, information and data given herein are believed to be accurate and reliable but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements of suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should assume that all safety measures are indicated or that other measures may not be required. Specifications are typical and may not apply to all connectors.

For further information on your individual application requirements, contact: Amphenol Corporation

North America:
Amphenol Industrial Operations
180 N. Freeport Drive, Plant 4
Nogales, AZ 85621
Tel: (520) 285-5130
Fax: (520) 285-5134
Email: rpedrazzini@amphenol-aio.com

Europe:
Amphenol Industrial Operations Europe
Via Barbiana 5
1-20020 Lainate (MI) Italy
Tel: +39 02 93254.204
Fax: +39 02 93254.444
Email: info@amphenol-aio.com

Middle East:
Amphenol Middle East Enterprises FZE
Office C-37 PO Box 21107
Ajman Free Zone, UAE
Tel: +9716-7422494
Fax: +9716-7422941
Email: ameetze@elm.ae

Asia:
Amphenol Technology Shenzhen Ltd
Block 5 Fuan 2nd Industrial Park
Dayang Rd, Fuyong Baoan
Baoan, Shenzhen, China 518103
Tel: +86 755 2881 8389
Fax: +86 755 2991 8310
Email: enquiry@amphenol-aio.com