Helios Power

shine with renewable vitality

PIONEERING THE FUTURE OF RENEWABLE ENERGY

PRODUCT CATALOGUE

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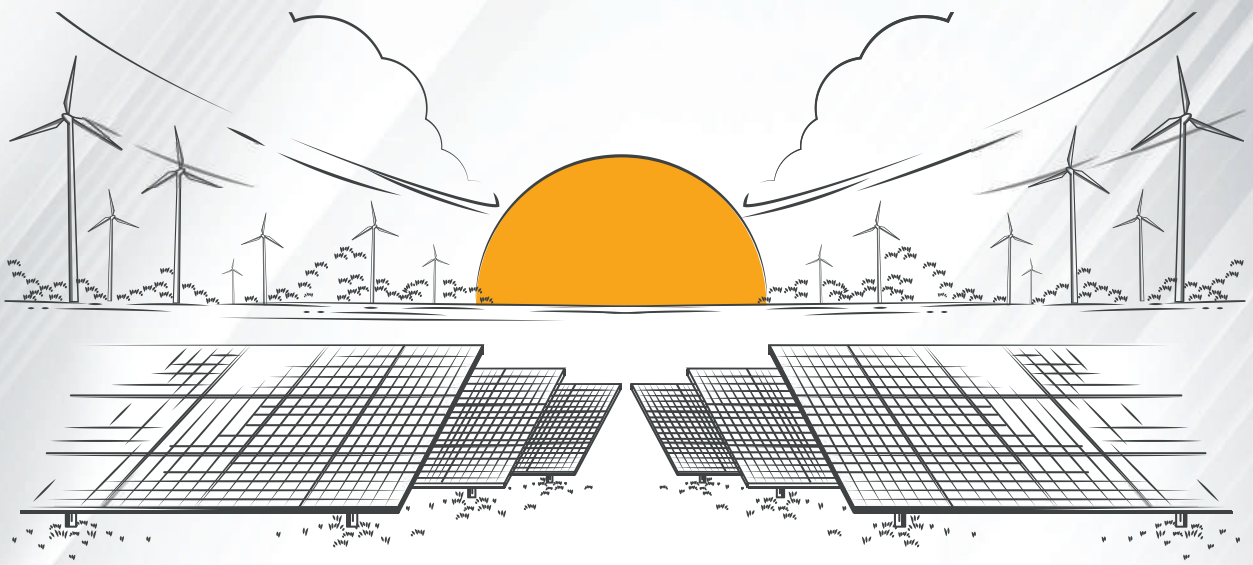

About Us

"Helios Power", founded in 2023, is a leading manufacturer, exporter, and service provider of innovative photovoltaic (PV) connectors, split junction boxes, and related components. We specialize in high-quality, reliable solutions for the PV industry, including PV connectors, wire harnesses, junction boxes, and enclosures. Leveraging advanced automation and injection molding technologies, we deliver durable, high-performance products designed to support the global transition to clean energy.

Our Vision

Our vision is to lead the renewable energy sector through innovation, quality, and exceptional service. We aim to enhance the efficiency and sustainability of PV systems while meeting our customers' needs with precision and excellence. By developing cutting-edge solutions, we strive to contribute to a cleaner, greener future.

Our Mission

"Helios Power" is committed to providing reliable, efficient, and innovative PV components that maximize power generation and extend service life. With a focus on homegrown, India-designed solutions, we aim for 50GW capacity by 2030, positioning ourselves as a leader in the global PV industry.

PV SOLAR SPLIT JUNCTION BOX

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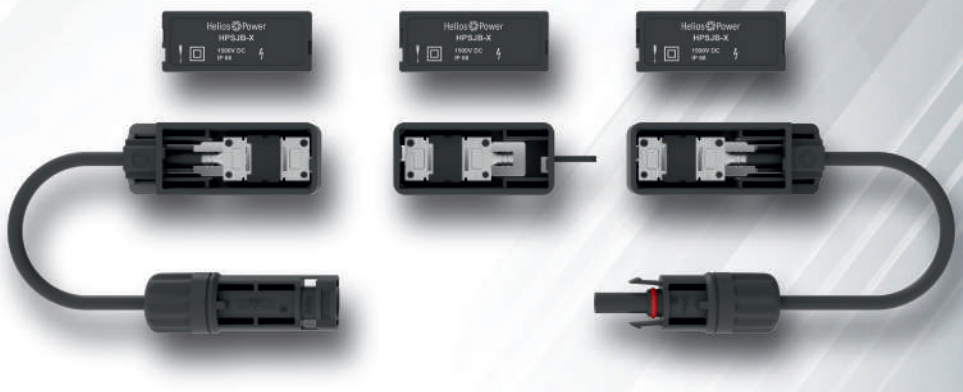
HPSJB-X (X= 25A or 30A or 35A)
HP : Helios Power
SJB : Split junction box
X : Rated Current (A)

HPSJB - 25A
Rated Current 25A & Solder type terminal for PV ribbon

HPSJB - 30A
Rated Current 30A & Solder type terminal for PV ribbon

HPSJB - 35A
Rated Current 35A & Solder type terminal for PV ribbon



TECHNICAL SPECIFICATION

Rated Voltage	1500V DC
Rated Current	25 A / 30 A / 35 A
Rated Impulse Voltage	16kV
Reverse Current	40A
RMS withstand Voltage	8kV
Protection Class	Class II
Contact Resistance	<3mΩ
Application Class	A
Flammability Class	UL94-V0, 5VA
Insulating Material	mPPE
Pollution Degree	1
Degree of Protection	IP 68
Over voltage Category	III
Lower Ambient Temperature	-40°C
Upper ambient Temperature	+85°C
Upper Limit Temperature of housing material	+125°C
Connecting DC PV Cable Size as per IEC 62930	4 mm²
Diode Rating	If=40A/VRRM=45 V for HPSJB-25A If=50A/VRRM=45 V for HPSJB-30A If=60A/VRRM=45 V for HPSJB-35A
No. of Diodes	3 Diode per each split HPSJB-X
Waterproofing Structure	2 component potting
Width of Busbar	Max. 8.5mm
Busbar Termination	Solder-type
Contact material	Copper Alloy with Tin Platting
Bounding mode	Silicon Glue/Sealant
PV Connectors (Male & Female)	1500V DC, 50A, IP 68 as per IEC 62852:2020
Product Standard	IEC 62790:2020, EN IEC 62790:2020

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PV STRAIGHT CONNECTOR

HP-A4 Max

Product Overview

The HP-A4 Max Series connectors are engineered with high-quality, weather-resistant materials to ensure long-term durability and performance. Designed to accommodate cable sizes ranging from 2.5 mm^2 to 10 mm^2, these connectors offer versatile compatibility for a wide range of applications.

With low contact resistance and excellent current transfer capability, the HP-A4 Max Series ensures optimal energy efficiency. Featuring an IP68 waterproof rating and an impressive operating temperature range from -40°C to +85 °C, these connectors deliver reliable performance even in the most demanding environments.

TECHNICAL SPECIFICATION	
Rated Voltage	1500V DC
Suitable Solar DC cable Size	2.5 mm^2, 4 mm^2, 6 mm^2, 10 mm^2
Contact Material	Copper with Tin platting
Rated Current	50A
Ambient Temperature	-40°C to +85°C
Ingress Protection	IP 68
Housing Material	mPPE
Upper limiting Temperature	105°C
Contact Resistance	≤0.25mΩ
Pollution Degree	II
Over Voltage category	III
Protection Degree	Class II
Application Class	A
Fire Resistance	UL94-V0
Rated Impulse Voltage	16KV
Certification	IEC 62852:2014/AMD:2020 (Certificate No. 1276270001)

PV PANEL CONNECTOR

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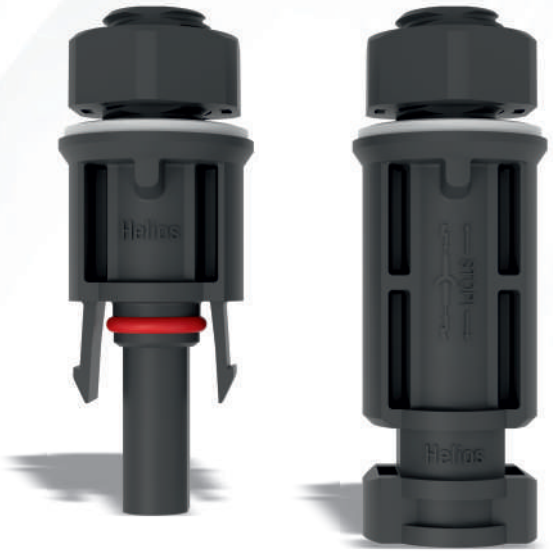

HP-A4 P

Product Overview

The HP-A4 P Series connectors are built with premium weather-resistant materials, ensuring exceptional long-term reliability in a variety of environments. Compatible with cable sizes from 2.5 mm² to 10 mm², these connectors are ideal for applications such as String Inverters and String Combiner Boxes.

Designed for high efficiency, the HP-A4 P Series features low contact resistance and excellent current transfer capabilities. With an IP 68 waterproof rating and an extended operating temperature range of -40°C to +85°C, they provide robust and consistent performance in demanding outdoor conditions.

TECHNICAL SPECIFICATION	
Rated Voltage	1500V DC
Suitable Solar DC cable Size	2.5 mm², 4 mm², 6 mm², 10 mm²
Contact Material	Copper with Tin platting
Rated Current	50A
Ambient Temperature	-40°C to +85°C
Ingress Protection	IP 68
Housing Material	mPPE
Upper limiting Temperature	105°C
Contact Resistance	≤0.25mΩ
Pollution Degree	II
Over Voltage category	III
Protection Degree	Class II
Application Class	A
Fire Resistance	UL94-V0
Rated Impulse Voltage	16KV
Certification	IEC 62852:2014/AMD:2020 (Certificate No. 1276270001)

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PV INLINE FUSE CONNECTOR

A6-MAX

Product Overview

The A6 Max Fuse Connectors are engineered with premium weather-resistant materials to ensure exceptional long-term reliability. Designed for on-site installation, they provide robust protection for positive strings and support a wide range of cable sizes from 2.5 mm² to 6 mm². Ideal for use as branch connectors with integrated replaceable fuse applications, they are also suitable for protection of String Inverter MPPT across various system configurations. Featuring low contact resistance and high current transfer capacity, the A6 Max Fuse Connectors deliver enhanced operational efficiency. With an IP 68 waterproof rating and wide operating temperature tolerance, they are built to perform reliably in demanding environments.

TECHNICAL SPECIFICATION	
Rated Voltage	1500V DC
Rated Current	32A
Fuse Dimension	Ø10mm*85mm
Fuse Standard	IEC/EN 60269-6:2011 IEC/EN 60269-1:2007+A1+A2
Ambient Temperature	-40°C to +85°C
IP	IP 68
Rated Breaking Capacity	30KA@1500V
Time Constant	1-3ms
Pollution Degree	Class II
Protection Degree	Class II
Fire Resistance	UL94-V0
Rated Impulse Voltage	16KV
Locking System	NEC Locking Type
Cable Length	100mm±5mm
Cable Size	2.5 mm², 4 mm² & 6 mm² as per EN 50619 / IEC 62930

INLINE FUSE LINK SELECTION GUIDE

TYPE	Fuse Voltage	Fuse Size	Fuse Current	Cable Specification	PV Connector
A6-Max-1500-5	1500 VDC	Ø10 x 85mm	5A	DC 1500V, 14AWG/2.5mm²	HP-A4 Max or Customized
A6-Max-1500-15			15A	DC 1500V, 12AWG/4mm²	
A6-Max-1500-20			20A	DC 1500V, 12AWG/4mm²	
A6-Max-1500-25			25A	DC 1500V, 12AWG/6mm²	
A6-Max-1500-30			30A	DC 1500V, 10AWG/6mm²	
A6-Max-1500-32			32A	DC 1500V, 10AWG/6mm²	

PV Y-TYPE WIRE HARNESS

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Male Harness – Positive String

Female Harness – Negative String

Product Overview

Helios Power provides advanced over-molded wire harness solutions tailored for photo-voltaic applications. Designed with a plug-and-socket interface and multiple input/output configurations, these harnesses ensure reliable and flexible connectivity for solar power systems. The rigid, precision-engineered Y-joint and low contact resistance of the straight connectors contribute to enhanced efficiency across the power plant.

Customizable to specific project requirements, the harnesses support configurations with straight or inline fuse connectors and are compatible with 2.5 mm^2, 4.0 mm^2, and 6.0 mm^2 cable sizes. Built with flame-retardant engineering thermoplastic elastomers, they offer superior UV resistance and are ideally suited for long-term use in PV power generation environments.

TECHNICAL SPECIFICATION	
Rated Voltage	1500V DC
Rated Current	50 A (Output)
Y-Joint Current Rating	58 A (Output)
RMS Test Voltage	8kV (1500 V)
Ambient Temperature	-40°C to +85°C
Degree of Protection	IP 68
Safety Class	II
Pollution Degree	II
Rated Conductor Size	2.5 mm^2,4.0 mm^2 & 6.0 mm^2
Locking System	Snap In Locking Type
Fire Resistance	UL94-V0

Note:
- 'Helios Power' Wire Harness solutions are customized based on cable size, length & type of connectors.
- Solar DC Cable 2.5 mm^2, 4.0mm^2 & 6.0 mm^2 as per standard IEC 62930/EN50618

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PV Y-TYPE HARNESS WITH INLINE FUSE

Male Harness with Inline Fuse - Positive string

Product Overview

Helios Power offers over-molded wire harness solutions with integrated inline fuse protection, specifically designed for photo-voltaic applications. Featuring a plug-and-socket interface with multiple input and output options, these harnesses ensure safe and efficient connectivity with built-in fuse safety.

Customizable to project needs, the harnesses can be configured with straight inline fuse connectors and support cable sizes of 2.5 mm^2, 4.0 mm^2, and 6.0 mm^2. They are compatible with easily replaceable fuse links (Ø10 x 85 mm) rated up to 32A, providing added flexibility and protection.

Constructed from flame-retardant engineering thermoplastic elastomers, these wire harnesses offer excellent resistance to UV exposure and are ideally suited for long-term use in PV power generation systems.

TECHNICAL SPECIFICATION	
Rated Voltage	1500V DC
Rated Current	50 A (Output)
Y-Joint Current Rating	58 A (Output)
RMS Test Voltage	8kV (1500 V)
Ambient Temperature	-40°C to +85°C
Degree of Protection	IP 68 (1.2m, 1h)
Safety Class	II
Pollution Degree	II
Rated Conductor Size	4.0 mm^2/ 6.0 mm^2
Locking System	Snap In Locking Type
Fire Resistance	UL94-V0
Rated Impulse Voltage	16kV

INLINE FUSE LINK SELECTION GUIDE

TYPE	Fuse Voltage	Fuse Size	Fuse Current	Cable Specification	PV Connector
A6-Max-1500-5	1500 VDC	Ø10 x 85mm	5A	DC 1500V, 14AWG/2.5mm^2	HP-A4 Max or Customized
A6-Max-1500-15			15A	DC 1500V, 12AWG/4mm^2	
A6-Max-1500-20			20A	DC 1500V, 12AWG/4mm^2	
A6-Max-1500-25			25A	DC 1500V, 12AWG/6mm^2	
A6-Max-1500-30			30A	DC 1500V, 10AWG/6mm^2	
A6-Max-1500-32			32A	DC 1500V, 10AWG/6mm^2	

Note:
- 'Helios Power' Wire Harness solutions are customized based on cable size, length, Fuse Link & type of connectors.
- Solar DC Cable 2.5mm^2, 4.0mm^2 & 6.0 mm^2 as per standard EN50618/IEC 62930:2020.

SOLAR DCDB AND ACDB ENCLOUSER

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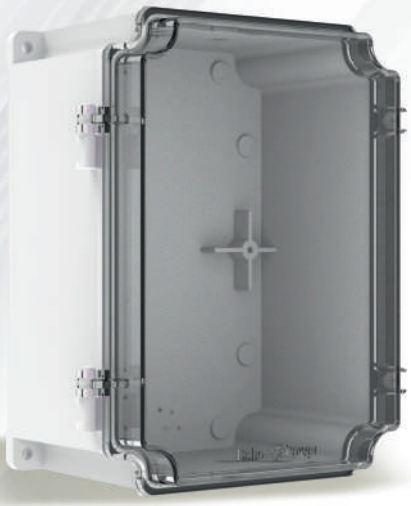

180 x 130 x 100mm

210 x 190 x 100mm

Product Overview

Acrylonitrile Butadiene Styrene (ABS) & Polycarbonate (PC) for cover use to manufacture the Junction boxes has been selected to grant the maximum protection against highly corrosive agents and maximum UV protection, which is suitable for outdoor as well as indoor application and having following features.

- Cover screw is made of stainless steel.
- Box gasket and protection cap made of silicone.
- Suitable for polyamide or metallic cable glands.

Design

- Compact Design
- Ease of installation
- Round Edge Design
- Premium Quality & High-End Strength.
- Hinged Design cover
- Ease of Wall Moumting Holes
- Two Different Sizes

Protection

- Ingress Protection: IP67
- UV Resistance Material
- Scratch Resistance Material
- Impact Resistance Ik07

Application

- For Solar DCDB and ACDB Boxes
- Terminal Boxes
- Emergency Cell Units
- Lighting Controls
- Battery Containers
- Electrical Housings
- Switches and Changeover Control Stations
- EV Charging Box

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PV ACCESSORIES

Product Description
DC Cable Cutter
Product Part code
HPCC

Product Description
Crimping Tool
Product Part code
HPCRMP

Product Description
Cable Stripping tool
Product Part code
HPCSTRP

Product Description
Opening and Tightening Tool
for HP-A4 Max Series
Product Part code
HP-A4-MAX-THO

Product Description
Opening and Tightening Tool
for Inline Fuse HP-A6 Max Series
Product Part Code
HP-A6-MAX-THO

Product Description
90°& 180°Solar DC cable clip
Product Part Code

90^0 & 180^0 SOLAR CABLE CLIP

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Design

- Compact Design
- Ease of installation
- Round Edge Design
- Premium Quality & Strength.
- For 1-3 mm aluminum rail
- Sophisticated double-compression design for two wires run side by side

Application

- High Quality with SS 304
- Maintenance Free
- No need to drill holes
- Time saving while I&C
- 25 years of life span
- Safe and long-lasting

TECHNICAL SPECIFICATION	
Installation Site	Solar Panel Mounts
Profile Material	SS 304 Stainless Steel
Color	Polishing
Wind Load	60 m / s
Snow Load	1.4 KN/M2
PV Modules	Framed / Frameless
Designed Lifespan	25 years

Features

- Our stainless still 90^0 & 180^0 Solar Cable Clip can be used for Max. 7.0 mm^2 Solar cable diameter.
- PV panel cable clips can prevent damaging wire insulation which can cause ground faults and fire.
- It can be installed on the underside of the PV panel's aluminum frame, with 90° and 180° holders for cable routing. This setup ensures all wires are protected from sharp edges, rough surfaces, and direct sunlight.
- It can offer sufficient support for two solar cable lines go through, 1 meter Max for one clip is recommended.
- Can be exposed in extreme outdoor environments like:- salty air / desert / snow.
- Our 90^0 & 180^0 solar cable clips are good replacement for plastic fastener and cable ties.

**Technical specifications may change in line with technical advances and industry standards.

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Disclaimer: The exposure to or direct contact with chemicals or oils of HP-A4 & A6 range of products may cause corrosion, degradation of performance, or cracking of the product, thus such exposure or direct contact should be strictly prohibited during the process of product manufacturing, transportation, installation and application. The chemicals that may come into contact with or be used in the process above. Technical parameter may be change as per manufacturer's recommendation.