

## FUNCTION BOX SPECIFICATIONS

<b><u>Shape</u></b>
Rectangular
<b><u>Interface Type</u></b>
AC/DC
<b><u>Certification</u></b>
UL, TUV
<b><u>Rated Voltage</u></b>
600/1000V
<b><u>Standard</u></b>
2pfg1169/08.2007,IEC60228 Class 5,IEC60332-1,IEC6
<b><u>Color</u></b>
Black or Red
<b><u>Operating Temperature</u></b>
-40 to 120 Temperature Degree
Trademark
<b><u>Specification</u></b>
1.5sqmm-35sqmm
HS Code
8544492100

## **SOLAR AC&DC CABLE SPECIFICATIONS.**

<b><u>DC Spec</u></b>
Double insulated, electron-beam cross-linked cables for photovoltaic power applications. With reduced diameter and integrated jacket.

<b><u>Construction</u></b>	
■ Conductor	Tinned fine copper strands, acc. to VDE 0295 /IEC 60228, Class 5
■ Insulation	XLPO, flame retardant, halogen free, electron-beam cross-linked
■ Jacket	XLPO, flame retardant, halogen free, electron-beam cross-linked, UV and ozone resistant
■ Jacket color	● black

<b><u>Thermal characteristics</u></b>	
Operating temperature	-40 °C up to +125 °C -40 °F up to +257 °F
Ambient temperature	-40 °C up to +90 °C -40 °F up to +194 °F
Max. short circuit temp	+280 °C, +536 °F / 5 s

<b><u>Standards / Material properties</u></b>
■ Fire performance: IEC 60332-1; IEC 60332-3-24
■ Smoke emission: IEC 61034; EN 61034-2
■ Low fire load: DIN 51900
■ Approvals: TÜV 2 PfG 1169 08.2007 PV1-F
■ Appl. standards: UNE 21123; UNE 20.460-5-52, UTE C 32-502

<b><u>AC Spec</u></b>
SOLARpower Alu-ATA

<b><u>Applications</u></b>
Halogen free. UV resistant low voltage cable. Especially well suited for outdoor applications and burial directly in the ground thanks to the very robust outer sheath and the aluminium shield.

<b><u>Construction</u></b>	
■ Conductor	Aluminium stranded wire, compacted. class 2
■ Insulation	XLPE. halogen free
■ Armouring	Aluminium tape / extra hard compound
■ Jacket	Copolymer, halogen free termite and rodent protection
■ Jacket colour	black

<b><u>Thermal characteristics</u></b>	
Operating temperature	-40 °C up to +90 °C -40 °F up to +194 °F
Ambient temperature	-40 °C up to +90 °C
Min. permissible installation temperature	-10 °C
Max. short circuit temp	+250 °C, +482 °F / 5 s

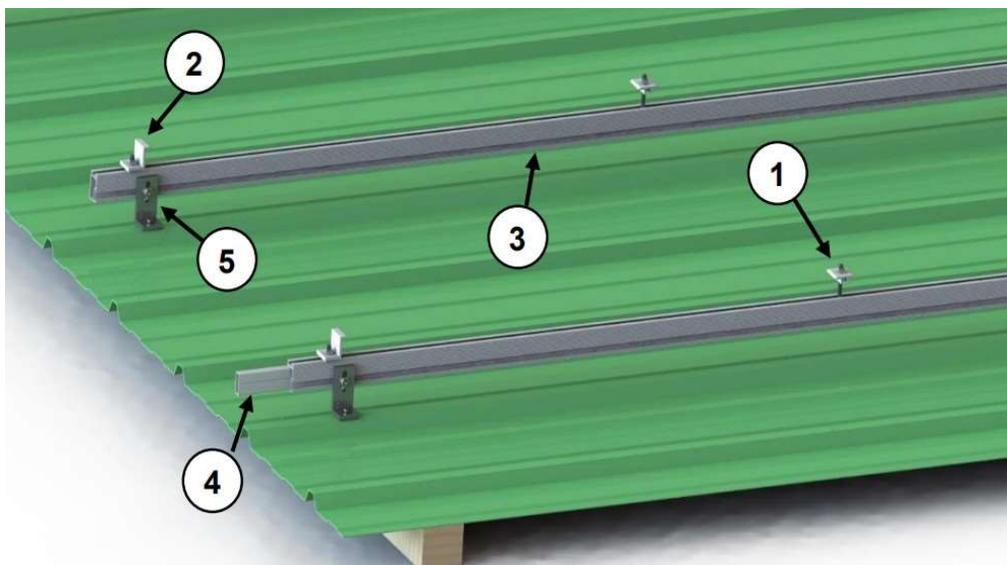
<b><u>Standards / Material properties</u></b>	
■ Halogen free: IEC 60754-1; EN 50267-2-1	
■ Based on BS 5467 and EN50618	

## SOLAR BRACKET SPECIFICATIONS.

### Product Details

Installation Site : Pitched metal roof
Building Height : Up to 20m
Max Wind Speed : 60 m/s
Snow Load : Up to 1.4KN/m <sup>2</sup>
standards : JIS C8955:2011 and AS/NZS 1170
Material : SUS304 & AL 6005-T5
Color : Natural
Anti-corrosive : Anodized
<b>Warranty : 12 years warranty</b>
Duration : More than 20 years

<b>1. Inter Clamp</b>
<b>2. End Clamp</b>
<b>3. Rail</b>
<b>4. Connector</b>
<b>5. Hook</b>



## **INVERTER SPECIFICATIONS.**

### **1 General Features**

6 strings intelligent monitoring and fast trouble-shooting
RS485 and USB ports for communication and data management
Local graphic LCD display and remote monitoring
Max. efficiency 98.6%
European efficiency 98.3%
3 MPPTs per unit, effectively reducing string mismatch
DC switch integrated, safe and convenient for maintenance
Residual Current Monitoring Unit (RCMU) integrated
Fuse free design
Natural cooling technology
Protection degree of IP65
Type II surge arresters for both DC and AC

### **2 Technical Spec**

Max. Efficiency		0.986
European Efficiency		0.983
Input		
Max. Input Voltage	1,000 V	
Max. Current per MPPT	18 A	
Max. Short Circuit Current per MPPT	25 A	
Start Voltage	250 V	
MPPT Operating Voltage Range	200 V ~ 950 V	
Rated Input Voltage	620 V	
Number of Inputs		6
Number of MPP Trackers		3
	Output	
<b>3</b> Rated AC Active Power	17,000 W - 20,000 W	
Max. AC Apparent Power	18,700 VA - 22,000 VA	

	Max. AC Active Power (cos $\phi$ =1)	18,700 W - 22,000 W
	Rated Output Voltage	220 V / 380 V, 230 V / 400 V, 3W+N+PE - 220 V / 380 V, 230 V / 400 V, 3W+N+PE
	Rated AC Grid Frequency	50 Hz / 60 Hz
	Rated Output Current	25.8 A @380 V, 24.7 A @400 V - 30.4 A @380 V, 29 A @400 V
	Max. Output Current	28.5 A - 33.5 A
4	Adjustable Power Factor Range	0.8 LG 0.8 LD
	Max. Total Harmonic Distortion	< 3%
		Protection
5	Input-side Disconnection Device	Yes
	Anti-islanding Protection	Yes
	AC Overcurrent Protection	Yes
	DC Reverse-polarity Protection	Yes
	PV-array String Fault Monitoring	Yes
	DC Surge Arrester	Type II
	AC Surge Arrester	Type II
	DC Insulation Resistance Detection	Yes
	Residual Current Monitoring Unit	Yes
		Communication
	Display	Graphic LCD
	RS485	Yes
	USB	Yes
		General
	Dimensions (W x H x D)	520 x 610 x 266 mm (20.5 x 24.0 x 10.5 inch)
	Weight (with mounting plate)	50 kg (110.2 lb.)
	Operating Temperature Range	-25°C ~ 60°C (-13°F ~ 140°F)
	Cooling Method	Natural Convection
	Max. Operating Altitude	3,000 m (9,842 ft.)
	Relative Humidity	0 ~ 100%
	DC Connector	Amphenol Helios H4
	AC Connector	Amphenol C16/3
	Protection Degree	IP65
	Topology	Transformerless
		Standard Compliance <i>(more available upon request)</i>
	Certificate	EN 62109-1/-2, IEC 62109-1/-2, IEC 62116

	IEC 61727, NB/T 32004-2013, VDE-AR-N-4105, VDE 0126-1-1, BDEW, G59/3, UTE C 15-712-1, CEI 0-16, CEI 0-21, C10/11, EN 50438-Ireland, EN 50438-Turkey,
Grid Code	AS 4777, PEA (Only 20KTL), MEA (Only 20KTL), NRS 097-2-1

## **SOLAR PANEL SPECIFICATIONS.**

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