

PHOTOVOLTAIC CABLES

AKAT SUKI



MAY 2022

CONTENTS

04 EN 50618 + IEC 62930 + UL

Developed according to TUV & UL requirements and designed to meet the rigours of the outdoor application environment to provide long term durability and flexibility, combined with ease of installation.

13 EN 50618 + IEC 62930

Developed according to EN & IEC requirements and designed to meet the rigours of the outdoor application environment to provide long term durability and flexibility, combined with ease of installation.

18 APPLICATION -GUIDE

Why to choose photovoltaic cable? Hence, only PV cables can meet these severe conditions: outdoor use, UV resistant, weather resistant, high temperatures, high water-resistant.

22 GUIDE OF PV CABLE USAGE

The data in this guide are the theoretical recommended values under the specific laying conditions and for reference only.

26 SUCCESS STORY

Global leader in Photovoltaic (PV) cable manufacturing. Every year we deliver more than 50 million meters of PV cables for connecting solar panels, inverters, combiner boxes and other PV harness applications around the world.





CULTURE

GLOBAL LEADER IN PHOTOVOLTAIC (PV) CABLE

We believe that clean energy must play an important part of the world's consumable energy and we take responsibility to leave a greener earth for our future generations. As a result, all of our products are manufactured using halogen-free materials.

We continually invest in R&D and manufacturing process improvements. With advanced material scientific research, all Akatsuki PV products are designed and manufactured in accordance with PV industry standards. Akatsuki PV cables are suitable for use with all major manufacturers' connectors.

Akatsuki is a young but fast growing company having already been recognized by many multinational companies as a quality, cost conscious PV cable supplier. We value our relationships with our customers greatly, and with your support, Akatsuki Ltd will stay strong and become even stronger as an industry leader.

CSR

Akatsuki's CSR Value has three aspects:

- A. Focus on environmental friendly industry practices
- B. Conducting sustainable business
- C. Caring for the community

DC SOLAR CABLE EN + UL



Part No.:6351D_KC230_90039005_V2

DESCRIPTION

Non-Halogen Cable for 1000V Photovoltaic Power System Class 5 TC Stranding Low Smoke Density and Direct Burial Applied, Cable also designed for Floating PV System.

STANDARDS

IEC 60228, IEC 60332-1-2, IEC 60754, IEC 60811, IEC 61034, IEC 62930
UL 44, UL 854, UL 1581, UL 2556, UL 4703
EN 50618, TUV 2 PFG 2750/09.20
ROHS 2011/65/EU

CABLE CONSTRUCTION



Conductor	Stranded tinned copper
Size	2.5mm ² /14AWG
Stranding	47/0.25
Diameter	2.0mm
Inner Layer	XLPO
Minimum Average Thickness	1.14mm
Color	White
Outer Layer	XLPO
Minimum Average Thickness	0.8mm
Color	Black
Diameter	5.94±0.1mm

ELECTRICAL CHARACTERISTICS (at +20°C)

Voltage Rating	
UL 4703	1000V
EN 50618	1000V
IEC 62930	1000V
TÜV 2PFG 2750	1000V
Insulation Resistance	≥ 1000 MΩ.km
Voltage Withstand	6500 VAC
Conductor DC Resistance	≤ 8.21 Ω/km

OTHER CHARACTERISTICS

Bending Radius	
Dynamic	≥ 5 X OD
Static	≥ 4 X OD
Flammability	VW, IEC 60332-1-2
Working Temperature	105°C Dry, 90°C Wet
Cable Light Transmittance	≥ 60%

PRINT LEGEND

AKATSUKI E497908 (UL) 14AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR AKATSUKI H1Z2Z2-K 2.5mm²
R 50385976 WPV WATERPROOF AKATSUKI 62930 IEC 131 2.5mm² HALOGEN FREE LOW SMOKE R 50406787
—— AKATSUKI E497908 (UL) 14AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR —— AKATSUKI
H1Z2Z2-K 2.5mm² R 50385976 WPV WATERPROOF —— AKATSUKI 62930 IEC 131 2.5mm² HALOGEN FREE LOW SMOKE R
50406787 ——

Notes: With or without line on whole length above will be required.
Both marking will be required according to the purchase order.

HISTORY

Dec 22, 2017	First issue	Draft
May 8, 2018	Add IEC marking according to IEC 62930 standard requirement	V0
Mar 21, 2022	Add 2PFG 2750 standard requirement and marking	V1
May 30, 2022	Adjust marking according requirement	V2

This datasheet may be subject to change without notification.

6351D_KC230_90039005_V2

DC SOLAR CABLE EN + UL



Part No.:6352D_KC230_90039005_V2

DESCRIPTION

Non-Halogen Cable for 1000V Photovoltaic Power System Class 5 TC Stranding Low Smoke Density and Direct Burial Applied, Cable also designed for Floating PV System.

STANDARDS

IEC 60228, IEC 60332-1-2, IEC 60754, IEC 60811, IEC 61034, IEC 62930
UL 44, UL 854, UL 1581, UL 2556, UL 4703
EN 50618, TUV 2 PFG 2750/09.20
ROHS 2011/65/EU

CABLE CONSTRUCTION



Conductor	Stranded tinned copper
Size	4mm ² /12AWG
Stranding	52/0.30
Diameter	2.4mm
Inner Layer	XLPO
Minimum Average Thickness	1.14mm
Color	White
Outer Layer	XLPO
Minimum Average Thickness	0.8mm
Color	Black
Diameter	6.35±0.2mm

ELECTRICAL CHARACTERISTICS (at +20°C)

Voltage Rating	
UL 4703	1000V
EN 50618	1000V
IEC 62930	1000V
TÜV 2PFG 2750	1000V
Insulation Resistance	≥ 1000 MΩ.km
Voltage Withstand	6500 VAC
Conductor DC Resistance	≤ 5.09 Ω/km

OTHER CHARACTERISTICS

Bending Radius	
Dynamic	≥ 5 X OD
Static	≥ 4 X OD
Flammability	VW, IEC 60332-1-2
Working Temperature	105°C Dry, 90°C Wet
Cable Light Transmittance	≥ 60%

PRINT LEGEND

AKATSUKI E497908 (UL) 12AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR AKATSUKI H1Z2Z2-K 4mm²
R 50385976 WPV WATERPROOF AKATSUKI 62930 IEC 131 4mm² HALOGEN FREE LOW SMOKE R 50406787
—— AKATSUKI E497908 (UL) 12AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR —— AKATSUKI
H1Z2Z2-K 4mm² R 50385976 WPV WATERPROOF —— AKATSUKI 62930 IEC 131 4mm² HALOGEN FREE LOW SMOKE R
50406787 ——

Notes: With or without line on whole length above will be required.
Both marking will be required according to the purchase order.

HISTORY

Jan 17, 2018	First issue	Draft
May 8, 2018	Add IEC marking according to IEC 62930 standard requirement	V0
Dec 30, 2021	Add 2PFG 2750 standard requirement and marking	V1
May 30, 2022	Adjust marking according requirement	V2

This datasheet may be subject to change without notification.

6352D_KC230_90039005_V2

DC SOLAR CABLE EN + UL



Part No.:6352DB_KC230_90039005_V2

DESCRIPTION

Non-Halogen Cable for 1000V Photovoltaic Power System Class 5 TC Stranding Low Smoke Density and Direct Burial Applied, Cable also designed for Floating PV System.

STANDARDS

IEC 60228, IEC 60332-1-2, IEC 60754, IEC 60811, IEC 61034, IEC 62930
UL 44, UL 854, UL 1581, UL 2556, UL 4703
EN 50618, TUV 2 PFG 2750/09.20
ROHS 2011/65/EU

CABLE CONSTRUCTION



Conductor	Stranded tinned copper
Size	4mm ² /12AWG
Stranding	56/0.30
Diameter	2.4mm
Inner Layer	XLPO
Minimum Average Thickness	1.14mm
Color	White
Outer Layer	XLPO
Minimum Average Thickness	0.8mm
Color	Black
Diameter	6.35±0.2mm

ELECTRICAL CHARACTERISTICS (at +20°C)

Voltage Rating	
UL 4703	1000V
EN 50618	1000V
IEC 62930	1000V
TÜV 2PFG 2750	1000V
Insulation Resistance	≥ 1000 MΩ.km
Voltage Withstand	6500 VAC
Conductor DC Resistance	≤ 5.09 Ω/km

OTHER CHARACTERISTICS

Bending Radius	
Dynamic	≥ 5 X OD
Static	≥ 4 X OD
Flammability	VW, IEC 60332-1-2
Working Temperature	105°C Dry, 90°C Wet
Cable Light Transmittance	≥ 60%

PRINT LEGEND

AKATSUKI E497908 (UL) 12AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR AKATSUKI H1Z2Z2-K 4mm²
R 50385976 WPV WATERPROOF AKATSUKI 62930 IEC 131 4mm² HALOGEN FREE LOW SMOKE R 50406787
—— AKATSUKI E497908 (UL) 12AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR —— AKATSUKI
H1Z2Z2-K 4mm² R 50385976 WPV WATERPROOF —— AKATSUKI 62930 IEC 131 4mm² HALOGEN FREE LOW SMOKE R
50406787 ——

Notes: With or without line on whole length above will be required.
Both marking will be required according to the purchase order.

HISTORY

Dec 22, 2017	First issue	Draft
May 8, 2018	Add IEC marking according to IEC 62930 standard requirement	V0
Dec 28, 2021	Add 2PFG 2750 standard requirement and marking	V1
May 30, 2022	Adjust marking according requirement	V2

This datasheet may be subject to change without notification.

6352DB_KC230_90039005_V2

DC SOLAR CABLE EN + UL



Part No.:6352DB_KC230_90033017_V1

DESCRIPTION

Non-Halogen Cable for 1000V Photovoltaic Power System Class 5 TC Stranding Low Smoke Density and Direct Burial Applied, Cable also designed for Floating PV System.

STANDARDS

IEC 60228, IEC 60332-1-2, IEC 60754, IEC 60811, IEC 61034, IEC 62930
UL 44, UL 854, UL 1581, UL 2556, UL 4703
EN 50618, TUV 2 PFG 2750/09.20
ROHS 2011/65/EU

CABLE CONSTRUCTION



Conductor	Stranded tinned copper
Size	4mm ² /12AWG
Stranding	56/0.30
Diameter	2.4mm
Inner Layer	XLPO
Minimum Average Thickness	1.14mm
Color	White
Outer Layer	XLPO
Minimum Average Thickness	0.8mm
Color	Red
Diameter	6.35±0.2mm

ELECTRICAL CHARACTERISTICS (at +20°C)

Voltage Rating	
UL 4703	1000V
EN 50618	1000V
IEC 62930	1000V
TUV 2PFG 2750	1000V
Insulation Resistance	≥ 1000 MΩ.km
Voltage Withstand	6500 VAC
Conductor DC Resistance	≤ 5.09 Ω/km

OTHER CHARACTERISTICS

Bending Radius	
Dynamic	≥ 5 X OD
Static	≥ 4 X OD
Flammability	VW, IEC 60332-1-2
Working Temperature	105°C Dry, 90°C Wet
Cable Light Transmittance	≥ 60%

PRINT LEGEND

AKATSUKI E497908 (UL) 12AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR AKATSUKI H1Z2Z2-K 4mm²
R 50385976 WPV WATERPROOF AKATSUKI 62930 IEC 131 4mm² HALOGEN FREE LOW SMOKE R 50406787

HISTORY

Jun 13, 2018	First issue	Draft
Dec 28, 2021	Add 2PFG 2750 standard requirement and marking	V0
May 30, 2022	Adjust marking according requirement	V1

DC SOLAR CABLE EN + UL



Part No.:6353D_KC230_90039005_V2

DESCRIPTION

Non-Halogen Cable for 1000V Photovoltaic Power System Class 5 TC Stranding Low Smoke Density and Direct Burial Applied, Cable also designed for Floating PV System.

STANDARDS

IEC 60228, IEC 60332-1-2, IEC 60754, IEC 60811, IEC 61034, IEC 62930
UL 44, UL 854, UL 1581, UL 2556, UL 4703
EN 50618, TUV 2 PFG 2750/09.20
ROHS 2011/65/EU

CABLE CONSTRUCTION



Conductor	Stranded tinned copper
Size	6mm ² /10AWG
Stranding	78/0.30
Diameter	3.0mm
Inner Layer	XLPO
Minimum Average Thickness	1.14mm
Color	White
Outer Layer	XLPO
Minimum Average Thickness	0.8mm
Color	Black
Diameter	6.97±0.2mm

ELECTRICAL CHARACTERISTICS (at +20°C)

Voltage Rating	
UL 4703	1000V
EN 50618	1000V
IEC 62930	1000V
TÜV 2PFG 2750	1000V
Insulation Resistance	≥ 1000 MΩ.km
Voltage Withstand	6500 VAC
Conductor DC Resistance	≤ 3.39 Ω/km

OTHER CHARACTERISTICS

Bending Radius	
Dynamic	≥ 5 X OD
Static	≥ 4 X OD
Flammability	VW, IEC 60332-1-2
Working Temperature	105°C Dry, 90°C Wet
Cable Light Transmittance	≥ 60%

PRINT LEGEND

AKATSUKI E497908 (UL) 10AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR AKATSUKI H1Z2Z2-K 6mm²
R 50385976 WPV WATERPROOF AKATSUKI 62930 IEC 131 6mm² HALOGEN FREE LOW SMOKE R 50406787
—— AKATSUKI E497908 (UL) 10AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR —— AKATSUKI
H1Z2Z2-K 6mm² R 50385976 WPV WATERPROOF —— AKATSUKI 62930 IEC 131 6mm² HALOGEN FREE LOW SMOKE R
50406787 ——

Notes: With or without line on whole length above will be required.
Both marking will be required according to the purchase order.

HISTORY

Dec 22, 2017	First issue	Draft
May 8, 2018	Add IEC marking according to IEC 62930 standard requirement	V0
Dec 28, 2021	Add 2PFG 2750 standard requirement and marking	V1
May 30, 2022	Adjust marking according requirement	V2

This datasheet may be subject to change without notification.

6353D_KC230_90039005_V2

DC SOLAR CABLE EN + UL



Part No.:6354D_KC230_90039005_V2

DESCRIPTION

Non-Halogen Cable for 1000V Photovoltaic Power System Class 5 TC Stranding Low Smoke Density and Direct Burial Applied, Cable also designed for Floating PV System.

STANDARDS

IEC 60228, IEC 60332-1-2, IEC 60754, IEC 60811, IEC 61034, IEC 62930
UL 44, UL 854, UL 1581, UL 2556, UL 4703
EN 50618, TUV 2 PFG 2750/09.20
ROHS 2011/65/EU

CABLE CONSTRUCTION



Conductor	Stranded tinned copper
Size	10mm ² /8AWG
Stranding	77/0.40
Diameter	4.1mm
Inner Layer	XLPO
Minimum Average Thickness	1.39mm
Color	White
Outer Layer	XLPO
Minimum Average Thickness	0.8mm
Color	Black
Diameter	8.57±0.3mm

ELECTRICAL CHARACTERISTICS (at +20°C)

Voltage Rating	
UL 4703	1000V
EN 50618	1000V
IEC 62930	1000V
TÜV 2PFG 2750	1000V
Insulation Resistance	≥ 1000 MΩ.km
Voltage Withstand	7500 VAC
Conductor DC Resistance	≤ 1.95 Ω/km

OTHER CHARACTERISTICS

Bending Radius	
Dynamic	≥ 5 X OD
Static	≥ 4 X OD
Flammability	VW, IEC 60332-1-2
Working Temperature	105°C Dry, 90°C Wet
Cable Light Transmittance	≥ 60%

PRINT LEGEND

AKATSUKI E497908 (UL) 8AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR AKATSUKI H1Z2Z2-K 10mm²
R 50385976 WPV WATERPROOF AKATSUKI 62930 IEC 131 10mm² HALOGEN FREE LOW SMOKE R 50406787
—— AKATSUKI E497908 (UL) 8AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR —— AKATSUKI
H1Z2Z2-K 10mm² R 50385976 WPV WATERPROOF —— AKATSUKI 62930 IEC 131 10mm² HALOGEN FREE LOW SMOKE R
50406787 ——

Notes: With or without line on whole length above will be required.
Both marking will be required according to the purchase order.

HISTORY

Dec 22, 2017	First issue	Draft
May 8, 2018	Add IEC marking according to IEC 62930 standard requirement	V0
Mar 21, 2022	Add 2PFG 2750 standard requirement and marking	V1
May 30, 2022	Adjust marking according requirement	V2

This datasheet may be subject to change without notification.

6354D_KC230_90039005_V2

DC SOLAR CABLE EN + UL



Part No.:6355D_KC230_90039005_V2

DESCRIPTION

Non-Halogen Cable for 1000V Photovoltaic Power System Class 5 TC Stranding Low Smoke Density and Direct Burial Applied, Cable also designed for Floating PV System.

STANDARDS

IEC 60228, IEC 60332-1-2, IEC 60754, IEC 60811, IEC 61034, IEC 62930
UL 44, UL 854, UL 1581, UL 2556, UL 4703
EN 50618, TUV 2 PFG 2750/09.20
ROHS 2011/65/EU

CABLE CONSTRUCTION



Conductor	Stranded tinned copper
Size	16mm ² /6AWG
Stranding	126/0.40
Diameter	5.1mm
Inner Layer	XLPO
Minimum Average Thickness	1.39mm
Color	White
Outer Layer	XLPO
Minimum Average Thickness	1.14mm
Color	Black
Diameter	10.5±0.5mm

ELECTRICAL CHARACTERISTICS (at +20°C)

Voltage Rating	
UL 4703	1000V
EN 50618	1000V
IEC 62930	1000V
TÜV 2PFG 2750	1000V
Insulation Resistance	≥ 1000 MΩ.km
Voltage Withstand	7500 VAC
Conductor DC Resistance	≤ 1.24 Ω/km

OTHER CHARACTERISTICS

Bending Radius	
Dynamic	≥ 5 X OD
Static	≥ 4 X OD
Flammability	VW, IEC 60332-1-2
Working Temperature	105°C Dry, 90°C Wet
Cable Light Transmittance	≥ 60%

PRINT LEGEND

AKATSUKI E497908 (UL) 6AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR AKATSUKI H1Z2Z2-K 16mm²
R 50385976 WPV WATERPROOF AKATSUKI 62930 IEC 131 16mm² HALOGEN FREE LOW SMOKE R 50406787
—— AKATSUKI E497908 (UL) 6AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR —— AKATSUKI
H1Z2Z2-K 16mm² R 50385976 WPV WATERPROOF —— AKATSUKI 62930 IEC 131 16mm² HALOGEN FREE LOW SMOKE R
50406787 ——

Notes: With or without line on whole length above will be required.
Both marking will be required according to the purchase order.

HISTORY

Dec 22, 2017	First issue	Draft
May 8, 2018	Add IEC marking according to IEC 62930 standard requirement, adjust cable OD	V0
Mar 21, 2022	Add 2PFG 2750 standard requirement and marking	V1
May 30, 2022	Adjust marking according requirement	V2

This datasheet may be subject to change without notification.

6355D_KC230_90039005_V2

DC SOLAR CABLE EN + UL



Part No.:6356D_KC230_90039005_V2

DESCRIPTION

Non-Halogen Cable for 1000V Photovoltaic Power System Class 5 TC Stranding Low Smoke Density and Direct Burial Applied, Cable also designed for Floating PV System.

STANDARDS

IEC 60228, IEC 60332-1-2, IEC 60754, IEC 60811, IEC 61034, IEC 62930
UL 44, UL 854, UL 1581, UL 2556, UL 4703
EN 50618, TUV 2 PFG 2750/09.20
ROHS 2011/65/EU

CABLE CONSTRUCTION



Conductor	Stranded tinned copper
Size	25mm ² /4AWG
Stranding	190/0.40
Diameter	6.3mm
Inner Layer	XLPO
Minimum Average Thickness	1.39mm
Color	White
Outer Layer	XLPO
Minimum Average Thickness	1.14mm
Color	Black
Diameter	11.8±0.5mm

ELECTRICAL CHARACTERISTICS (at +20°C)

Voltage Rating	
UL 4703	1000V
EN 50618	1000V
IEC 62930	1000V
TÜV 2PFG 2750	1000V
Insulation Resistance	≥ 1000 MΩ.km
Voltage Withstand	7500 VAC
Conductor DC Resistance	≤ 0.795 Ω/km

OTHER CHARACTERISTICS

Bending Radius	
Dynamic	≥ 5 X OD
Static	≥ 4 X OD
Flammability	VW, IEC 60332-1-2
Working Temperature	105°C Dry, 90°C Wet
Cable Light Transmittance	≥ 60%

PRINT LEGEND

AKATSUKI E497908 (UL) 4AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR AKATSUKI H1Z2Z2-K 25mm²
R 50385976 WPV WATERPROOF AKATSUKI 62930 IEC 131 25mm² HALOGEN FREE LOW SMOKE R 50406787
—— AKATSUKI E497908 (UL) 4AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR —— AKATSUKI
H1Z2Z2-K 25mm² R 50385976 WPV WATERPROOF —— AKATSUKI 62930 IEC 131 25mm² HALOGEN FREE LOW SMOKE R
50406787 ——

Notes: With or without line on whole length above will be required.
Both marking will be required according to the purchase order.

HISTORY

Dec 22, 2017	First issue	Draft
May 8, 2018	Add IEC marking according to IEC 62930 standard requirement, adjust cable OD	V0
Mar 21, 2022	Add 2PFG 2750 standard requirement and marking	V1
May 30, 2022	Adjust marking according requirement	V2

This datasheet may be subject to change without notification.

6356D_KC230_90039005_V2

DC SOLAR CABLE EN + UL



Part No.:6357D_KC230_90039005_V2

DESCRIPTION

Non-Halogen Cable for 1000V Photovoltaic Power System Class 5 TC Stranding Low Smoke Density and Direct Burial Applied, Cable also designed for Floating PV System.

STANDARDS

IEC 60228, IEC 60332-1-2, IEC 60754, IEC 60811, IEC 61034, IEC 62930
UL 44, UL 854, UL 1581, UL 2556, UL 4703
EN 50618, TUV 2 PFG 2750/09.20
ROHS 2011/65/EU

CABLE CONSTRUCTION



Conductor	Stranded tinned copper
Size	35mm ² /2AWG
Stranding	266/0.40
Diameter	7.6mm
Inner Layer	XLPO
Minimum Average Thickness	1.39mm
Color	White
Outer Layer	XLPO
Minimum Average Thickness	1.14mm
Color	Black
Diameter	13.1±0.5mm

ELECTRICAL CHARACTERISTICS (at +20°C)

Voltage Rating	
UL 4703	1000V
EN 50618	1000V
IEC 62930	1000V
TÜV 2PFG 2750	1000V
Insulation Resistance	≥ 1000 MΩ.km
Voltage Withstand	7500 VAC
Conductor DC Resistance	≤ 0.565 Ω/km

OTHER CHARACTERISTICS

Bending Radius	
Dynamic	≥ 5 X OD
Static	≥ 4 X OD
Flammability	VW, IEC 60332-1-2
Working Temperature	105°C Dry, 90°C Wet
Cable Light Transmittance	≥ 60%

PRINT LEGEND

AKATSUKI E497908 (UL) 2AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR AKATSUKI H1Z2Z2-K 35mm²
R 50385976 WPV WATERPROOF AKATSUKI 62930 IEC 131 35mm² HALOGEN FREE LOW SMOKE R 50406787
—— AKATSUKI E497908 (UL) 2AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR —— AKATSUKI
H1Z2Z2-K 35mm² R 50385976 WPV WATERPROOF —— AKATSUKI 62930 IEC 131 35mm² HALOGEN FREE LOW SMOKE R
50406787 ——

Notes: With or without line on whole length above will be required.
Both marking will be required according to the purchase order.

HISTORY

Dec 22, 2017	First issue	Draft
May 8, 2018	Add IEC marking according to IEC 62930 standard requirement, adjust cable OD	V0
Mar 21, 2022	Add 2PFG 2750 standard requirement and marking	V1
May 30, 2022	Adjust marking according requirement	V2

This datasheet may be subject to change without notification.

6357D_KC230_90039005_V2

DC SOLAR CABLE EN + IEC



Part No.:9001_KC230_90039005_V1

DESCRIPTION

Non-Halogen Cable for 1000V Photovoltaic Power System Class 5 TC Stranding Low Smoke Density and Direct Burial Applied, Cable also designed for Floating PV System.

STANDARDS

IEC 60228, IEC 60332-1-2, IEC 60754, IEC 60811, IEC 61034, IEC 62930
EN 50618, TUV 2 PFG 2750/09.20
ROHS 2011/65/EU

CABLE CONSTRUCTION



Conductor	Stranded Tinned Copper
Size	2.5mm ²
Stranding	47/0.25
Diameter	2.0mm
Insulation	XLPO
Minimum Average Thickness	0.7mm
Color	White
Jacket	XLPO
Minimum Average Thickness	0.8mm
Color	Black
Diameter	5.0±0.1mm

ELECTRICAL CHARACTERISTICS (at +20°C)

Voltage Rating	1000V
EN 50618	1000V
IEC 62930	1000V
TUV 2PFG 2750	1000V
Insulation Resistance	≥ 1000 MΩ.km
Voltage Withstand	6500 VAC
Conductor DC Resistance	≤ 8.21 Ω/km

OTHER CHARACTERISTICS

Bending Radius	
Dynamic	≥ 5 X OD
Static	≥ 4 X OD
Flammability	IEC 60332-1-2
Working Temperature	-40°C~+90°C
Cable Light Transmittance	≥ 60%

PRINT LEGEND

AKATSUKI H1Z2Z2-K 2.5mm² R 50385976 WPV WATERPROOF AKATSUKI 62930 IEC 131 2.5mm² HALOGEN FREE LOW SMOKE R 50406787
—— AKATSUKI H1Z2Z2-K 2.5mm² R 50385976 WPV WATERPROOF —— AKATSUKI 62930 IEC 131 2.5mm² HALOGEN FREE LOW SMOKE R 50406787 ——

Notes: With or without line on whole length above will be required.
Both marking will be required according to the purchase order.

HISTORY

Dec 29, 2017	First issue	Draft
May 7, 2018	Add IEC marking according to IEC 62930 standard requirement	V0
May 30, 2022	Adjust marking according requirement	V1

DC SOLAR CABLE EN + IEC



Part No.:9002_KC230_90039005_V1

DESCRIPTION

Non-Halogen Cable for 1000V Photovoltaic Power System Class 5 TC Stranding Low Smoke Density and Direct Burial Applied, Cable also designed for Floating PV System.

STANDARDS

IEC 60228, IEC 60332-1-2, IEC 60754, IEC 60811, IEC 61034, IEC 62930
EN 50618, TUV 2 PFG 2750/09.20
ROHS 2011/65/EU

CABLE CONSTRUCTION



Conductor	Stranded Tinned Copper
Size	4mm ²
Stranding	52/0.30
Diameter	2.4mm
Insulation	XLPO
Minimum Average Thickness	0.7mm
Color	White
Jacket	XLPO
Minimum Average Thickness	0.8mm
Color	Black
Diameter	5.4±0.1mm

ELECTRICAL CHARACTERISTICS (at +20°C)

Voltage Rating	1000V
EN 50618	1000V
IEC 62930	1000V
TUV 2PFG 2750	1000V
Insulation Resistance	≥ 1000 MΩ.km
Voltage Withstand	6500 VAC
Conductor DC Resistance	≤ 5.09 Ω/km

OTHER CHARACTERISTICS

Bending Radius	
Dynamic	≥ 5 X OD
Static	≥ 4 X OD
Flammability	IEC 60332-1-2
Working Temperature	-40°C~+90°C
Cable Light Transmittance	≥ 60%

PRINT LEGEND

AKATSUKI H1Z2Z2-K 4mm² R 50385976 WPV WATERPROOF AKATSUKI 62930 IEC 131 4mm² HALOGEN FREE LOW SMOKE R 50406787
—— AKATSUKI H1Z2Z2-K 4mm² R 50385976 WPV WATERPROOF ——— AKATSUKI 62930 IEC 131 4mm² HALOGEN FREE LOW SMOKE R 50406787 ———

Notes: With or without line on whole length above will be required.
Both marking will be required according to the purchase order.

HISTORY

Dec 29, 2017	First issue	Draft
May 7, 2018	Add IEC marking according to IEC 62930 standard requirement	V0
May 30, 2022	Adjust marking according requirement	V1

DC SOLAR CABLE EN + IEC



Part No.:9003_KC230_90039005_V1

DESCRIPTION

Non-Halogen Cable for 1000V Photovoltaic Power System Class 5 TC Stranding Low Smoke Density and Direct Burial Applied, Cable also designed for Floating PV System.

STANDARDS

IEC 60228, IEC 60332-1-2, IEC 60754, IEC 60811, IEC 61034, IEC 62930
EN 50618, TUV 2 PFG 2750/09.20
ROHS 2011/65/EU

CABLE CONSTRUCTION



Conductor	Stranded Tinned Copper
Size	6mm ²
Stranding	78/0.30
Diameter	3.0mm
Insulation	XLPO
Minimum Average Thickness	0.7mm
Color	White
Jacket	XLPO
Minimum Average Thickness	0.8mm
Color	Black
Diameter	6.0±0.2mm

ELECTRICAL CHARACTERISTICS (at +20°C)

Voltage Rating	1000V
EN 50618	1000V
IEC 62930	1000V
TUV 2PFG 2750	1000V
Insulation Resistance	≥ 1000 MΩ.km
Voltage Withstand	6500 VAC
Conductor DC Resistance	≤ 3.39 Ω/km

OTHER CHARACTERISTICS

Bending Radius	
Dynamic	≥ 5 X OD
Static	≥ 4 X OD
Flammability	IEC 60332-1-2
Working Temperature	-40°C~+90°C
Cable Light Transmittance	≥ 60%

PRINT LEGEND

AKATSUKI H1Z2Z2-K 6mm² R 50385976 WPV WATERPROOF AKATSUKI 62930 IEC 131 6mm² HALOGEN FREE LOW SMOKE R 50406787
—— AKATSUKI H1Z2Z2-K 6mm² R 50385976 WPV WATERPROOF ——— AKATSUKI 62930 IEC 131 6mm² HALOGEN FREE LOW SMOKE R 50406787 ———

Notes: With or without line on whole length above will be required.
Both marking will be required according to the purchase order.

HISTORY

Dec 29, 2017	First issue	Draft
May 7, 2018	Add IEC marking according to IEC 62930 standard requirement	V0
May 30, 2022	Adjust marking according requirement	V1

DC SOLAR CABLE EN + IEC



Part No.:9004_KC230_90039005_V1

DESCRIPTION

Non-Halogen Cable for 1000V Photovoltaic Power System Class 5 TC Stranding Low Smoke Density and Direct Burial Applied, Cable also designed for Floating PV System.

STANDARDS

IEC 60228, IEC 60332-1-2, IEC 60754, IEC 60811, IEC 61034, IEC 62930
EN 50618, TUV 2 PFG 2750/09.20
ROHS 2011/65/EU

CABLE CONSTRUCTION



Conductor	Stranded Tinned Copper
Size	10mm ²
Stranding	77/0.40
Diameter	4.1mm
Insulation	XLPO
Minimum Average Thickness	0.7mm
Color	White
Jacket	XLPO
Minimum Average Thickness	0.8mm
Color	Black
Diameter	7.2±0.3mm

ELECTRICAL CHARACTERISTICS (at +20°C)

Voltage Rating	
EN 50618	1000V
IEC 62930	1000V
TUV 2PFG 2750	1000V
Insulation Resistance	≥ 1000 MΩ.km
Voltage Withstand	6500 VAC
Conductor DC Resistance	≤ 1.95 Ω/km

OTHER CHARACTERISTICS

Bending Radius	
Dynamic	≥ 5 X OD
Static	≥ 4 X OD
Flammability	IEC 60332-1-2
Working Temperature	-40°C~+90°C
Cable Light Transmittance	≥ 60%

PRINT LEGEND

AKATSUKI H1Z2Z2-K 10mm² R 50385976 WPV WATERPROOF AKATSUKI 62930 IEC 131 10mm² HALOGEN FREE LOW SMOKE R 50406787
—— AKATSUKI H1Z2Z2-K 10mm² R 50385976 WPV WATERPROOF —— AKATSUKI 62930 IEC 131 10mm² HALOGEN FREE LOW SMOKE R 50406787 ——

Notes: With or without line on whole length above will be required.
Both marking will be required according to the purchase order.

HISTORY

Dec 29, 2017	First issue	Draft
May 7, 2018	Add IEC marking according to IEC 62930 standard requirement	V0
May 30, 2022	Adjust marking according requirement	V1

DC SOLAR CABLE EN + IEC



Part No.:9007_KC230_90039005_V0

DESCRIPTION

Non-Halogen Cable for 1000V Photovoltaic Power System Class 5 TC Stranding Low Smoke Density and Direct Burial Applied, Cable also designed for Floating PV System.

STANDARDS

IEC 60228, IEC 60332-1-2, IEC 60754, IEC 60811, IEC 61034, IEC 62930
EN 50618, TUV 2 PFG 2750/09.20
ROHS 2011/65/EU

CABLE CONSTRUCTION



Conductor	Stranded Tinned Copper
Size	35mm ²
Stranding	266/0.40
Diameter	7.6mm
Insulation	XLPO
Minimum Average Thickness	0.9mm
Color	White
Jacket	XLPO
Minimum Average Thickness	1.1mm
Color	Black
Diameter	12.1±0.5mm

ELECTRICAL CHARACTERISTICS (at +20°C)

Voltage Rating	1000V
EN 50618	1000V
IEC 62930	1000V
TUV 2PFG 2750	1000V
Insulation Resistance	≥ 1000 MΩ.km
Voltage Withstand	6500 VAC
Conductor DC Resistance	≤ 0.565 Ω/km

OTHER CHARACTERISTICS

Bending Radius	
Dynamic	≥ 5 X OD
Static	≥ 4 X OD
Flammability	IEC 60332-1-2
Working Temperature	-40 ~ +90 °C
Cable Light Transmittance	≥ 60%

PRINT LEGEND

AKATSUKI H1Z2Z2-K 35mm² R 50385976 WPV WATERPROOF AKATSUKI 62930 IEC 131 35mm² HALOGEN FREE LOW SMOKE R 50406787
—— AKATSUKI H1Z2Z2-K 35mm² R 50385976 WPV WATERPROOF —— AKATSUKI 62930 IEC 131 35mm² HALOGEN FREE LOW SMOKE R 50406787 ——

Notes: With or without line on whole length above will be required.
Both marking will be required according to the purchase order.

HISTORY

Nov 23, 2020	First issue	Draft
May 30, 2022	Adjust marking according requirement	V0

Why to choose photovoltaic cable?

One common factor for most of the photovoltaic power systems is outdoor use, which involves high temperatures and high UV radiation. Single-core cables with a maximum permissible DC voltage of 1.8 kV and a temperature range from -40°C to +90°C are generally used¹. The maximum conductor temperature is 120°C, and Short Circuit Temperature of laying >250°C not more than 5 sec, with Max. Cable storage temperature +40°C and min. installation temperature -25°C. Photovoltaic cables (PV cable) are designed to be UV resistant and weather resistant. They can be used within a large temperature range and are generally laid outside. Hence, only PV cables can meet these severe conditions.

How to choose the right photovoltaic cable?

The cable conductor usually uses tinned copper or bare copper. The insulation and jacket use 125°C XLPO which is environmentally non-toxic. The jacket color is generally black or white and it can be other colors as per customers' request. For the different standards, there are different requirements for the conductor material. For UL4703 (US), EETS and JCS4517 (Japan), the requirement conductor material can be tinned copper or bare copper. For TUV1169, 1990 or EN50618, the conductor must be tinned copper².

According to the different standards, Akatsuki offers different part numbers of PV cables to fit the market. Below we will explain the standard in detail to help you to understand how to choose the right PV cable for the projects.

TUV 2PfG 1169 Standard

Type of Description: PV1-F

Working Voltage: AC U0/U 600/1000V; DC 1800 V. If the cable is used in DC-systems the rated voltage between two conductors shall not exceed the 1.5 time value of rated

¹ From https://en.wikipedia.org/wiki/Solar_cable#cite_note-pv-1

² Standard is quoted from IEC 60228.

APPLICATION-GUIDE



voltage U of the cable. In single-phase earthed DC-systems this value shall be multiplied with factor 0.5³.

Part Number of Akatsuki: 705X, 635X, 650X, E3X

PV cable as a power transmission line, used in large ground plans, distributed power plans in photovoltaic power generation system, such as monocrystalline silicon, polycrystalline silicon solar cell components, such as Honey M, JKM320PP.

TUV 2PFG 1990Standard

Type of Description: PV1500DC-F

Working Voltage: DC 1500V. Maximum permitted voltage: DC 1,8 kV (conductor-earth, circuit not under load)⁴.

Part Number of Akatsuki: 650X, 780X, 795X, E3X

PV cable as a power transmission line, used in large ground plans, distributed power plans in photovoltaic power generation system, such as monocrystalline silicon, polycrystalline silicon solar cell components, such as Honey M, JKM320PP.

➤ EN 50618Standard

Type of Description:H1Z2Z2-K

Working Voltage:AC U0/U 1000/1000V, DC 1500V. The cables specified in this standard are particularly designed for use at the direct current (DC) side of photovoltaic-systems, with a nominal DC voltage up to 1,5 kV between conductors as well as between a conductor and the earth⁵.

Part Number of Akatsuki: 900X, 635X, 650X, 780X, 795X, E3X

³ From: TUV 2PFG 1169

⁴ From: TUV 2PFG 1990

⁵ From: EN 50618

APPLICATION-GUIDE



PV cable as a power transmission line, used in large ground plans, distributed power plans in photovoltaic power generation system, such as monocrystalline silicon, polycrystalline silicon solar cell components, such as Honey M, JKM320PP.

➤ **UL 4703Standard**

Working Voltage 600V, 1000V, 2000V

Part Number of Akatsuki 635X, 650X, 717X, 795X

PV cable as a power transmission line, used in large ground plans, distributed power plans in photovoltaic power generation system, such as monocrystalline silicon, polycrystalline silicon solar cell components, such as Honey M, JKM320PP.

➤ **EETS, JCS 4517Standard**

Working Voltage DC 1500V

Part Number of Akatsuki:650X, E0X, E3X

PV cable as a power transmission line, used in large ground plans, distributed power plans in photovoltaic power generation system, such as monocrystalline silicon, polycrystalline silicon solar cell components, such as Honey M, JKM320PP.

➤ **Current Rating of PV Cable**

Current carrying capacity according to method of installation⁶

Nominal cross sectional area	Single cable free in air A	Single cable on a surface A	Two loaded cables touching, on a surface A
1.5mm ² (16AWG)	30	29	24
2.5mm ² (14AWG)	41	39	33
4mm ² (12AWG)	55	52	44
6mm ² (10AWG)	70	67	57
10mm ² (8AWG)	98	93	79

⁶ From EN50618

APPLICATION-GUIDE



16mm ² (6AWG)	132	125	107
25mm ² (4AWG)	176	167	142
35mm ² (2AWG)	218	207	176

Ambient temperature Conversion factor

up to 60°C	1.0
70°C	0.92
80°C	0.84
90°C	0.75

Using customers should observe the above cable carrying capacity when choosing the appropriate cable specifications. The photovoltaic power plan commonly uses cable specifications 4mm²~6mm²(12AWG~10AWG).

GUIDE OF PV CABLE USAGE



Guide of PV Cable Usage

1. Application

PV cables for use in Photovoltaic (PV) Systems, suitable for permanent outdoor and indoor use for many years under variable demanding climate conditions. The cables are suitable to be used with Class II equipment. The cables are designed to operate at a normal continuous maximum conductor temperature of 90 °C. The permissible period of use at a maximum conductor temperature of 120 °C is limited to 20 000 h. The cables expected period of use under normal usage conditions as specified is at least 25 years.

The guide prepared according to IEC 60364-5-52, IEC 62930, the standard applies to low smoke halogen-free, single-core power cables with cross-linked insulation and sheath materials. The class of the conductor shall be Class 5 in accordance with IEC 60228 for cable that is directly connected to PV modules. Class 2 conductors are allowed for cables intended for fixed installation and not directly connected to the PV modules.

The data in this guide are the theoretical recommended values under the specific laying conditions and for reference only. In practical application, the influence of various factors and the change of conditions will lead to the deviation or difference of data. Users need to flexibly apply according to the actual situation.

2. Temperature range

Ambient temperature: -40~+90°C

Max. conductor temperature: +90°C

3. Rated voltage

The DC voltage rating of the cables is 1,5 kV, both between conductors as well as between conductors and earth. The maximum permitted operating DC voltage of the systems, in which the cables specified in this document are applied, shall not exceed 1,8 kV.

The AC voltage rating of the specified cables is 1/1 kV (U₀/U). The rated voltage in an AC system is expressed by the combination of two values U₀/U, expressed in (kilo)volts, where:

– U₀ is the r.m.s. value between any insulated conductor and earth,

– U is the r.m.s. value between any two phases.

4. Temperatures for storage and installation

Max. storage temperature: +45°C

Min. temperature for installation and handling: -25°C

5. Bending radius recommended

At cable temperature +10~+30°C:

Fixed installation: 4 x cable OD

Free movement: 5 x cable OD

Version: V1

GUIDE OF PV CABLE USAGE



6. Current carrying capacity in air or on a surface(abbr. CCC)

$$I = I_5 \times f_1 \times f_2$$

Where:

I ----- CCC under the specified conditions, in amperes (A)

I_5 ----- CCC under the standard conditions, in amperes (A), see Table1

f_1 ----- Conversion factors for ambient temperature, see Table2

f_2 ----- Conversion factors for multi- circuit, see Table3

Table 1 CCC under the standard conditions(I_5)

Nominal cross sectional area of conductor mm ²	Current carrying capacity according to method of installation		
	Single cable free in air A	Single cable on a surface A	Two loaded cables touching, on a surface A
1,5	31	30	24
2,5	42	40	33
4	57	54	45
6	72	69	58
10	98	96	80
16	132	130	107
25	183	174	138
35	227	215	171
50	287	273	209
70	361	344	269
95	433	411	328
120	508	483	382

Note: Ambient temperature 30°C.

Table 2 Conversion factors for different ambient temperatures

Ambient temperature (°C)	Conversion factor (f_1)	Ambient temperature (°C)	Conversion factor (f_1)
0	1.22	45	0.87
10	1.15	50	0.82
15	1.12	55	0.76
20	1.08	60	0.71
25	1.04	65	0.65
30	1.00	70	0.58
35	0.96	75	0.50
40	0.91	80	0.41

Table 3 Conversion factor for different number of circuits for cables touching in air on a surface

Number of circuits	1	2	3	4	5	6	7	8	9	12	16	20
Conversion factor (f_2)	1.00	0.80	0.70	0.65	0.60	0.57	0.54	0.52	0.50	0.45	0.41	0.38

Version: V1

GUIDE OF PV CABLE USAGE



7. Current carrying capacity in conduit in the ground (abbr. CCCC)

$$I_c = I_{cs} \times f_3 \times f_4$$

Where:

I_c ----- CCCC under the specified conditions, in amperes (A)

I_{cs} ----- CCCC under the standard conditions, in amperes (A), see Table4 f_3

----- Conversion factors for different ground temperatures, see Table5

f_4 ----- Conversion factors for different soil thermal resistivities, see Table6

Table 4 CCCC under the standard conditions

Nom. Cross sectional area of conductor (mm ²)	I_{cs} (A)		Nom. Cross sectional area of conductor (mm ²)	I_{cs} (A)		Nom. Cross sectional area of conductor (mm ²)	I_{cs} (A)	
	Two	Three		Two	Three		Two	Three
2.5	33	28	10	71	58	35	139	115
4	43	36	16	91	75	/	/	/
6	53	44	25	116	96	/	/	/

Notes: 1) Ambient temperature: 20°C in ground; 2)Two: Meas"two loaded conductors"; 3) Three: Meas"three loaded conductors".

Table 5 Conversion factors for different ground temperatures

Ground temperature (°C)	Conversion factor (f_3)	Ground temperature (°C)	Conversion factor (f_3)
10	1.07	50	0.76
15	1.04	55	0.71
20	1.00	60	0.65
25	0.96	65	0.60
30	0.93	70	0.53
35	0.89	75	0.46
40	0.85	80	0.38
45	0.80	/	/

Table 6 Conversion factors for different soil thermal resistivities

Thermal resistivity K.m/W	0.5	0.7	1.0	1.5	2.0	2.5	3.0
Conversion factor for cables in buried ducts(f_4)	1.28	1.20	1.18	1.10	1.05	1.00	0.96
Conversion factor for direct buried cables(f_5)	1.88	1.62	1.50	1.28	1.12	1.00	0.90

8. Current carrying capacity for cables direct in the ground (abbr. CCCD)

$$I_d = I_{ds} \times f_3 \times f_5 \times f_6$$

Where:

I_d ----- CCCD under the specified conditions, in amperes (A)

I_{ds} ----- CCCD under the standard conditions, in amperes (A), see Table7

f_3 ----- Conversion factors for different ground temperatures, see Table5

f_5 ----- Conversion factors for different soil thermal resistivities, see Table6

f_6 ----- Conversion factor for different number of circuits laid directly in the ground, see Table8

Version:V1

GUIDE OF PV CABLE USAGE



Table 7 CCCD under the standard conditions

Nom. Cross sectional area of conductor (mm ²)	I _{ds} (A)		Nom. Cross sectional area of conductor (mm ²)	I _{ds} (A)		Nom. Cross sectional area of conductor (mm ²)	I _{ds} (A)	
	Two	Three		Two	Three		Two	Three
2.5	35	30	10	77	65	35	155	129
4	46	39	16	100	84	/	/	/
6	58	49	25	129	107	/	/	/

Notes: 1) Ambient temperature: 20°C in ground; 2)Two: Meas"two loaded conductors"; 3) Three: Meas"three loaded conductors".

Table 8 Conversion factor for different number of circuits laid directly in the ground (cables touching)

Number of circuits	Conversion factor (f _g)	Number of circuits	Conversion factor (f _g)
2	0.75	8	0.43
3	0.65	9	0.41
4	0.60	12	0.36
5	0.55	16	0.32
6	0.50	20	0.29
7	0.45	/	/

9. Voltage drop

Nom. cross sectional area of conductor (mm ²)	Voltage drop(calculated values for single conductor) (mV/m.A)												
	Conductor temperature (°C)												
	0	10	20	30	40	50	60	70	80	90	100	110	120
2.5	7.56	7.89	8.21	8.53	8.86	9.18	9.50	9.82	10.15	10.47	10.79	11.11	11.44
4	4.69	4.89	5.09	5.29	5.49	5.69	5.89	6.09	6.29	6.49	6.69	6.89	7.09
6	3.12	3.26	3.39	3.52	3.66	3.79	3.92	4.06	4.19	4.32	4.46	4.59	4.72
10	1.80	1.87	1.95	2.03	2.10	2.18	2.26	2.33	2.41	2.49	2.56	2.64	2.72
16	1.14	1.19	1.24	1.29	1.34	1.39	1.43	1.48	1.53	1.58	1.63	1.68	1.73
25	0.73	0.76	0.80	0.83	0.86	0.89	0.92	0.95	0.98	1.01	1.05	1.08	1.11
35	0.52	0.54	0.57	0.59	0.61	0.63	0.65	0.68	0.70	0.72	0.74	0.77	0.79

10. Permissible short circuit current

Nom. Cross sectional area of conductor (mm ²)	Permissible short circuit current (1s, kA)
2.5	0.36
4	0.57
6	0.86
10	1.43
16	2.29
25	3.58
35	5.01

10. Short circuit temperature

The permitted short circuit temperature is 250 °C for a maximum period of 5s.

Version: V1

SUCCESS STORY



Floating Type - Yongan Detention Basin

Name Yongan Detention Basin	Town Kaohsiung	Country Taiwan
Year of construction 2018		
Nominal power output Est. 4.2MW	Annual Carbon Reduction 3,372metric tons	
Applied -Products 6352DB		
Module manufacturer URE	Module Type D1K_H3A	Inverter manufacturer DELTA
Remarks Float	Company Chan Yi Engineering	Customer New Green Power



Roof Type - CSBC Corporation

Name CSBC Corporation	Town Kaohsiung	Country Taiwan
Year of construction 2019		
Nominal power output Est. 13.8MW	Annual Carbon Reduction 10,332metric tons	
Applied -Products 6352DB		
Module manufacturer URE / TSEC	Module Type D1K_H3A / TS60-BMH	Inverter manufacturer DELTA
Remarks -	Company ACMEPOINT Energy	Customer New Green Power



Ground Type - Taichung Landfill

Name Taichung Landfill	Town Taichung	Country Taiwan
Year of construction 2019		
Nominal power output Est. 6.2MW	Annual Carbon Reduction 4,684metric tons	
Applied -Products 6352DB		
Module manufacturer URE	Module Type D1K_H3A	Inverter manufacturer PrimeVOLT
Remarks -	Company Hong Quan Sheng Technology	Customer New Green Power

SUCCESS STORY



Floating Type - Xinwen Detention Basin

Name Xinwen Detention Basin	Town Chiayi	Country Taiwan
Year of construction 2020		
Nominal power output Est. 36MW	Annual Carbon Reduction 28,648metric tons	
Applied -Products 6352DB		
Module manufacturer URE	Module Type D1K_H3A	Inverter manufacturer DELTA
Remarks Float	Company ACMEPOINT Energy	Customer New Green Power



Floating Type - Qianfengzi Detention Basin

Name ACMEPOINT Energy	Town Kaohsiung	Country Taiwan
Year of construction 2020		
Nominal power output Est. 5.9MW	Annual Carbon Reduction 4,337metric tons	
Applied -Products 6352DB		
Module manufacturer URE	Module Type D1K_H3A /	Inverter manufacturer DELTA
Remarks -	Company ACMEPOINT Energy	Customer New Green Power



Roof Type - ACMEPOINT Corporation

Name ACMEPOINT Energy	Town Kaohsiung	Country Taiwan
Year of construction 2020		
Nominal power output Est. 652KW	Annual Carbon Reduction -	
Applied -Products 6352DB		
Module manufacturer URE	Module Type D1K_H3A /	Inverter manufacturer DELTA
Remarks -	Company ACMEPOINT Energy	Customer ACMEPOINT Energy

SUCCESS STORY



Ground Type - Tainan Power plant

Name ACMEPOINT Energy	Town Tainan	Country Taiwan
Year of construction 2020		
Nominal power output Est. 496.54KW		Annual Carbon Reduction -
Applied -Products 6352DB		
Module manufacturer TSEC	Module Type TS60-BMH	Inverter manufacturer -
Remarks -	Company ACMEPOINT Energy	Customer -



Roof Type - TSEC Corporation

Name TSEC Corporation	Town Hsinchu	Country Taiwan
Year of construction 2019		
Nominal power output Est. 149.6KW		Annual Carbon Reduction 82.8metric tons
Applied -Products 6352DB		
Module manufacturer TSEC	Module Type TS60-BMH	Inverter manufacturer PrimeVOLT
Remarks -	Company TSEC	Customer TSEC



Ground Type - Yunlin Kouhu Power plant

Name SOLEQ Kouhu	Town Yunlin	Country Taiwan
Year of construction 2019		
Nominal power output Est. 10MW		Annual Carbon Reduction 8000metric tons
Applied -Products 6352DB		
Module manufacturer URE	Module Type D1K_H3A	Inverter manufacturer Delta
Remarks -	Company Shih Bang Technology	Customer Vena Energy

OUR COMMITMENT TO INDUSTRY

Since 1997 i-Powers has been serving the Taiwan renewable energy industry with innovative and quality Balance of System (BoS) solutions and value-added services.

i-Powers is the exclusive Taiwan distributor for a diverse range of products from reputable manufacturers who are leaders in their field and have long, stable corporate backgrounds.

We continually strive to offer products with the highest standards of quality, on-time delivery and cost-effectiveness - all important factors our customers need to succeed.

Our solutions are considered in the industry as "best-in-class" and we are privileged to have supported over 1,800 MW of solar projects in Taiwan across the residential, commercial and large scale segments.



OUR CUSTOMER



”

**WE PUT OUR
CUSTOMERS IN
THE CENTER OF
OUR BUSINESS BY
PROVIDING FAST,
QUALITY AND
INNOVATED
CABLE SOLUTIONS.**

“

