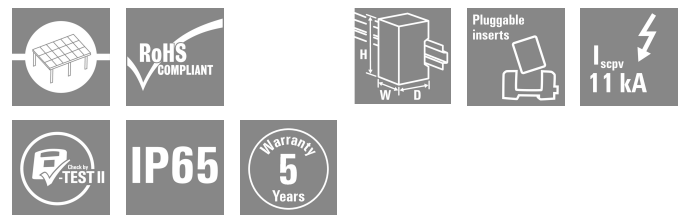


PVN DC 2I 1O 4MPP SPD1R WM4 11

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com



PV Next combiner boxes for inverters with 1 to 12 MPP trackers are used to protect the DC side of a photovoltaic system. The combiner boxes protect the inverter against overvoltages and thus comply with the European Directive CLC/TS 5 1643-32. In addition, these products offer the possibility to protect the system against reverse currents and the possibility to combine strings to save cables during installation.

General ordering data

| | |
|------------|---|
| Version | Photovoltaics, Combiner Box, PV Next, 1100 V, 4 MPP's, 2 Inputs / 1 Output per MPP, Surge protection I / II, WM4C |
| Order No. | 2737600000 |
| Type | PVN DC 2I 1O 4MPP SPD1R WM4 11 |
| GTIN (EAN) | 4050118824872 |
| Qty. | 1 items |

PVN DC 2I 10 4MPP SPD1R WM4 11

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Technical data

Approvals

Approvals



ROHS Conform

Dimensions and weights

| | | | |
|------------|--------|-----------------|-------------|
| Depth | 132 mm | Depth (inches) | 5.1968 inch |
| Height | 240 mm | Height (inches) | 9.4488 inch |
| Width | 400 mm | Width (inches) | 15.748 inch |
| Net weight | 3882 g | | |

Temperatures

Ambient temperature -40 °C...50 °C Humidity 5 - 90 %, no condensation

Environmental Product Compliance

| | |
|--------------------------------------|--------------------------------------|
| RoHS Compliance Status | Compliant with exemption |
| RoHS Exemption (if applicable/known) | 6c |
| REACH SVHC | Lead 7439-92-1 |
| SCIP | bdab5698-6a20-4370-8e28-8810d882d01a |

Included in delivery

| | | |
|----------------------|----------|---------------|
| Included accessories | Article | Mounting foot |
| | Quantity | 4 |

Approvals and norms

Approvals EN 61439-2, IEC 61439-2

Guarantee

Time interval 5 years

Electrical characteristics

| | |
|---------------------------------------|----------------------------------|
| Rated DC voltage | 1100 V |
| Rated short-term current resistance | Rated current 43.75 A |
| Current per Maximum Power Point, max. | 35 A |
| Rated DC current per connection | Current per string, max. 35.00 A |

Enclosure

| | | | |
|---------------------|--|------------------------|-------------------------|
| Insulating material | Polyester glass-fibre reinforced, Polycarbonate | Type of mounting | Wall mounting, 4 screws |
| Impact resistance | IK08 in accordance with IEC 62208, IK10 in accordance with IEC 62262 | Enclosure attachment | Via mounting feet |
| Protection class | II | Connection type string | Plug WM4C |

PVN DC 2I 10 4MPP SPD1R WM4 11

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Technical data

General data

| | | | |
|-----------------------|---------------------------------------|-------------------|------|
| Standards | EN 61643-31 | Protection degree | IP65 |
| Installation location | Protected outdoor area (Land and Sea) | | |

Inputs

| | | | | |
|--------------------------------------|--|---|--|--|
| Amount of maximum power points (MPP) | 4 | | | |
| Functional earth connector | Cable entry | Number of cable entries | 1 | |
| | | Cable diameter, min. | 5 mm | |
| | | Cable diameter, max. | 10 mm | |
| | | Cable gland | M 16 | |
| | Wire connection | Type of connection | Screw connection | |
| | | Flexible, max. H05(07) V-K | 25 mm ² | |
| | | w. wire end ferrule, DIN 46228 pt 1, max. | 16 mm ² | |
| | | Number of conduit inlets | 8 | |
| DC Input + & - | Wire connection | Type of connection | WM4C plug-in connector | |
| | | Compatible cable crosssection | EN 50618:2015 | |
| | | Wire cross-section, min. | 4 mm ² | |
| | | Wire cross-section, max. | 6 mm ² | |
| | Cable entry | Number of cable entries | 8 | |
| | Fuse type | Neither fuse cartridge nor holder | | |
| Fuses | No | | | |
| Max. number of DC inputs | per Maximum Power Point 2 inputs connected in parallel | | | |
| Number of string inputs per MPP | ≤ 2 | | | |
| Surge protection auxiliary contact | Cable entry | Cable diameter, min. | 5 mm | |
| | | Cable diameter, max. | 10 mm | |
| | | Cable gland | M 16 | |
| | Wire connection | Type of connection | Tension clamp connection with actuator | |
| | | Flexible, max. H05(07) V-K | 1.5 mm ² | |
| | | w. wire end ferrule, DIN 46228 pt 1, max. | 1.5 mm ² | |
| | | Number of inputs | 8 | |

Outputs

| | | | |
|---------------------------|----------------------------------|-------------------------------|------------------------|
| Max. number of DC outputs | per Maximum Power Point 1 output | | |
| DC Output + & - | Wire connection | Type of connection | WM4C plug-in connector |
| | | Compatible cable crosssection | TÜV 2 Pfg1169/08.07 |
| | | Wire cross-section, min. | 4 mm ² |
| | | Wire cross-section, max. | 6 mm ² |

PVN DC 2I 10 4MPP SPD1R WM4 11
Weidmüller Interface GmbH & Co. KG

 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com
Technical data
Surge protection DC side

| | | | |
|--|-------------|---|----------|
| Standards | EN 61643-31 | Lightning test current Iimp (10/350 µs) | 6.25 kA |
| Discharge current, max. (8/20 µs) | 40 kA | Protection level Up (+/-, -/PE, +/-PE) | ≤ 3.8 kV |
| Standby power consumption PC | <0.2 W | Short-circuit current ISCPV | 11000 A |
| Total discharge current I _{total} (8/20µs) | 50 kA | Discharge current I _n (8/20 µs) | 20 kA |
| Requirements class | Type I/II | Total discharge current I _{total} (10/350µs) | 12.5 kA |
| Protection level Up (-/PE) | ≤ 3.8 kV | Protection level Up (+/-) | ≤ 3.8 kV |
| Protection level Up (+/PE) | ≤ 3.8 kV | PV system voltage, max. U _{cpv} | 1100 V |
| Maximum continuous operating voltage DC UCPV mode +/-, -/PE, +/-PE | 1100 V | | |

DC load break switch

| | |
|-------------------------------|-----------|
| Switch disconnecter execution | no switch |
|-------------------------------|-----------|

Important note

| | |
|---------------------|--|
| Product information | <p>The SCIP number was assigned due to a lead content of more than 0.1 % of the net weight. Safe use instruction according to ECHA: The identification of the hazardous substance is sufficient to allow safe use of the article throughout its life cycle, including the service life, disassembly and waste/recycling phase</p> |
|---------------------|--|

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 8.0 | EC003857 | ETIM 9.0 | EC003857 |
| ETIM 10.0 | EC003857 | ECLASS 14.0 | 22-57-02-92 |
| ECLASS 15.0 | 22-57-02-92 | | |

Tender specification sheets

| | |
|--------------------|--|
| Long specification | <p>Combiner box for inverters with 4 MPP tracker, suitable for protecting the DC side of a photovoltaic system according to EN 51543-32. MPP1: 2 inputs, connection via WM4 C connector, compatible with cable type TÜV 2 Pfg1169/08.07 / EN 50618:2063 1 output, connection via WM4 C connector, compatible with cable type TÜV 2 Pfg1169/08.07 / EN 50618:2063 MPP2 to 4: identical to MPP1 Max. string voltage U_{oc}: 1000V 1 class/type I + II combined arrester with signal contact Connection of the signal contact via cable glands (8-12mmØ) max. conductor cross-section: 1.5mm² Connection of the functional earth via cable glands (8-12mmØ)</p> |
|--------------------|--|

PVN DC 2I 10 4MPP SPD1R WM4 11

Technical data

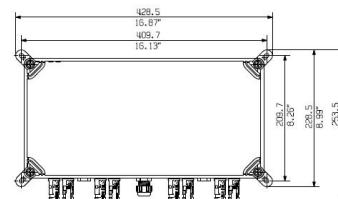
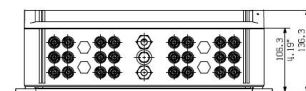
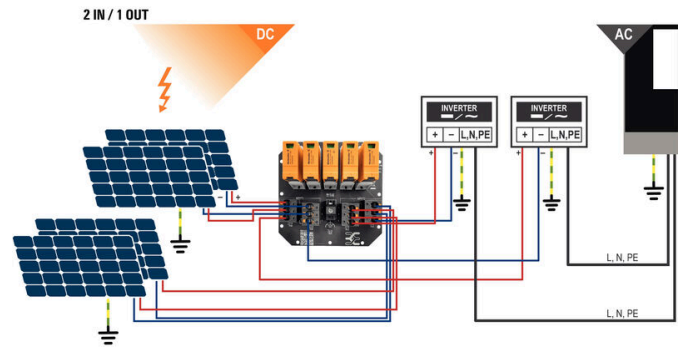
Conductor cross-section:
16-25mm²
Protection class: IP65
All built into a glas fibre
reinforced polyester
housing. Dimensions
HxWxD: 334x372x175
mm
Approval according to
low voltage switchgear
and controlgear IEC
61439-1:2011 and EN
61439-2:2011

PVN DC 2I 10 4MPP SPD1R WM4 11

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

Drawings

www.weidmueller.com

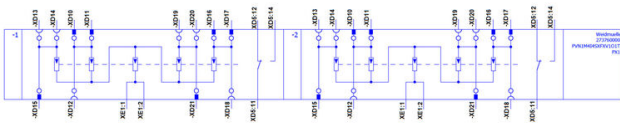


PVN DC 2I 10 4MPP SPD1R WM4 11

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

Drawings

www.weidmueller.com



PVN DC 2I 10 4MPP SPD1R WM4 11

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Accessories

PV Weather protection



General ordering data

| | | | |
|------------|----------------------------|--------------------------|--|
| Type | PV SUNCOVER 20/40/13 | Version | |
| Order No. | 8000143247 | Photovoltaics, Sun cover | |
| GTIN (EAN) | 4099987 111867 | | |
| Qty. | 1 ST | | |

Cutting tools



Cutting tools for conductors up to 8 mm, 12 mm, 14 mm and 22 mm outside diameter. The special blade geometry allows pinch-free cutting of copper and aluminium conductors with minimum physical effort. The cutting tools (KT 8 to KT 22) also come with VDE and GS-tested protective insulation up to 1,000 V in accordance with EN/IEC 60900.

General ordering data

| | | | |
|------------|----------------------------|--|--|
| Type | KT 14 | Version | |
| Order No. | 1157820000 | Cutting tools, Cutting tool for one-hand operation | |
| GTIN (EAN) | 4032248945344 | | |
| Qty. | 1 ST | | |

Tools



- For flexible and solid conductors with special insulating materials
- High-quality stripping for industrial applications (complies with aircraft industry requirements)
- Specially shaped blades enable stripping of special types of insulation and conductor configurations
- Stripping length adjustable via end stop
- Very versatile thanks to interchangeable stripping units
- Stripping results reproduced accurately over and over again
- No damage to the conductor
- A long-lasting, reliable tool thanks to its sturdy design
- Integrated cutting function

PVN DC 2I 10 4MPP SPD1R WM4 11

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Accessories

General ordering data

| | | | |
|------------|----------------------------|----------------------------------|--|
| Type | MULTI-STRIPAX PV | Version | |
| Order No. | 1190490000 | Photovoltaics, Plug-in connector | |
| GTIN (EAN) | 4032248973262 | | |
| Qty. | 1 ST | | |

Crosshead screwdriver Phillips

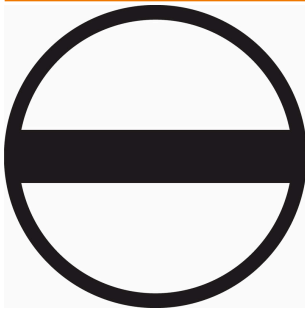


VDE insulated crosshead screwdriver, for Phillips screws, SDIK PH DIN 7438, ISO 8764/2-PH, output to ISO 8764-PH, SoftFinish grip

General ordering data

| | | | |
|------------|----------------------------|--|--|
| Type | SDIK PH3 X 150 | Version | |
| Order No. | 2749910000 | Screwdriver, Blade width (B): 3 mm, 150 mm, Blade thickness (A): 3 | |
| GTIN (EAN) | 4050118897210 | | |
| Qty. | 1 ST | | |

Slotted screwdriver



VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

General ordering data

| | | | |
|------------|----------------------------|---|--|
| Type | SDIS 0.6X3.5X100 | Version | |
| Order No. | 2749810000 | Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm | |
| GTIN (EAN) | 4050118897012 | | |
| Qty. | 1 ST | | |
| Type | SDIS 1.0X5.5X125 | Version | |
| Order No. | 2749850000 | Screwdriver, Blade width (B): 5.5 mm, Blade length: 125 mm, Blade thickness (A): 1 mm | |
| GTIN (EAN) | 4050118897050 | | |
| Qty. | 1 ST | | |

PVN DC 2I 10 4MPP SPD1R WM4 11

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Accessories

PV-Stick field connectors



Faster is better. This also applies to the cabling of solar systems. Our handy connectors stay firmly in your grip even in frosty temperatures and can be installed very quickly and easily without a crimping tool.

You don't need crimp contacts and crimping tools and you avoid assembly errors. This saves up to 50% installation time – without affecting quality. The new photovoltaic connectors are TÜV-approved and comply with IEC 62852.

Our "SNAP IN" technology enables safe connections with minimal effort – insert, turn: current!

- 1.500 V DC (DE) / 1,500 V DC (EN)
- SNAP IN technology
- Standard-compliant quality in accordance with IEC 62852
- Ergonomic, prize-winning design
- Fastest PV connector currently available
- Reliable latching

General ordering data

| | | |
|------------|----------------------------|--|
| Type | PV-STICK+ VPE10 | Version |
| Order No. | 1303450000 | Photovoltaics, Plug-in connector, DC version |
| GTIN (EAN) | 4050118102468 | |
| Qty. | 10 ST | |
| Type | PV-STICK- VPE10 | Version |
| Order No. | 1303490000 | Photovoltaics, Plug-in connector, DC version |
| GTIN (EAN) | 4050118102529 | |
| Qty. | 10 ST | |

Accessories



The dust protection cap "Dustcap VSSO" protects the Weidmüller and type 4 solar connectors against dust and dirt.

The "SafetyClip" protects the Weidmüller solar connectors against unintentional opening and can only be released using the special multi-tool.

General ordering data

| | | |
|------------|----------------------------|----------------------------|
| Type | VSSO WM4 C | Version |
| Order No. | 1254870000 | Photovoltaics, Flat design |
| GTIN (EAN) | 4050118047479 | |
| Qty. | 100 ST | |

PVN DC 2I 10 4MPP SPD1R WM4 11

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Accessories

External fixing lugs



External attachment lugs 4-part set

General ordering data

| | | | |
|------------|----------------------------|--|--|
| Type | MF FPC | Version | |
| Order No. | 9536040000 | FPC (polycarbonate empty enclosure), Mounting foot, Fixing lugs, | |
| GTIN (EAN) | 4032248009442 | Height: 40 mm, Width: 19 mm, Depth: 35.5 mm, Basic material: | |
| Qty. | 1 ST | Polyamide, Polyamide 66, Light Grey | |

UV-resistant cable ties



UV-resistant polyamide 6.6 ensures long durability of our special cable ties even with strong UV radiation. Ideal for continuous outdoor use.

General ordering data

| | | | |
|------------|----------------------------|---|--|
| Type | CB-UVR 290/4,5 BK | Version | |
| Order No. | 2659350000 | Cable ties, 4.5 x 290 mm, Polyamide 66, 220 N | |
| GTIN (EAN) | 4050118682816 | | |
| Qty. | 100 ST | | |

Y-Connector Cables



The Y cable is used for the parallel connection of several strings in a PV system, e.g. for splitting a line in front of an inverter.
 The cables are available in different connection variants.

General ordering data

| | | | |
|------------|----------------------------|---|--|
| Type | PVHYW-XXW+XX06W+15 | Version | |
| Order No. | 2814180000 | Photovoltaics, Y-Connector Cable, 1x WM4 C Male, 2x WM4 C | |
| GTIN (EAN) | 4064675298861 | Female, 6mm ² , 1500 V | |
| Qty. | 1 ST | | |

PVN DC 2I 10 4MPP SPD1R WM4 11

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Accessories

| | | | |
|------------|----------------------------|---|--|
| Type | PVHYW+XXW-XX06W-15 | Version | |
| Order No. | 2814190000 | Photovoltaics, Y-Connector Cable, 1x WM4 C Female, 2x WM4 C | |
| GTIN (EAN) | 4064675298878 | Male, 6mm ² , 1500 V | |
| Qty. | 1 ST | | |

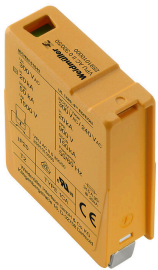
Sealing sets



General ordering data

| | | | |
|------------|----------------------------|---|--|
| Type | BLINDPLUG SET5 7X28MM | Version | |
| Order No. | 3077670000 | Photovoltaics, Blind plug | |
| GTIN (EAN) | 4099987081894 | | |
| Qty. | 1 ST | | |
| Type | BLINDPLUG SET50 7X28MM | Version | |
| Order No. | 3077650000 | Photovoltaics, Blind plug, Accessories, Blind plug, 50 pieces | |
| GTIN (EAN) | 4099987081870 | | |
| Qty. | 1 ST | | |

Spare Arrester



General ordering data

| | | | |
|------------|----------------------------|--|--|
| Type | VPU PV I+II O 1000 | Version | |
| Order No. | 2530600000 | Surge voltage arrester, Low voltage, Accessories, Surge protection I / | |
| GTIN (EAN) | 4050118540819 | II, Spare arrester | |
| Qty. | 9 ST | | |
| Type | VPU PV I+II OM 1000 | Version | |
| Order No. | 2534300000 | Surge voltage arrester, Low voltage, Surge protection I / II, Spare | |
| GTIN (EAN) | 4050118545906 | arrester | |
| Qty. | 9 ST | | |

PVN DC 2I 10 4MPP SPD1R WM4 11

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Counterpart

PV-Stick field connectors



Faster is better. This also applies to the cabling of solar systems. Our handy connectors stay firmly in your grip even in frosty temperatures and can be installed very quickly and easily without a crimping tool.

You don't need crimp contacts and crimping tools and you avoid assembly errors. This saves up to 50% installation time – without affecting quality. The new photovoltaic connectors are TÜV-approved and comply with IEC 62852.

Our "SNAP IN" technology enables safe connections with minimal effort – insert, turn: current!

- 1.500 V DC (DE) / 1,500 V DC (EN)
- SNAP IN technology
- Standard-compliant quality in accordance with IEC 62852
- Ergonomic, prize-winning design
- Fastest PV connector currently available
- Reliable latching

General ordering data

| | | |
|------------|----------------------------|--|
| Type | PV-STICK SET | Version |
| Order No. | 1422030000 | Photovoltaics, Plug-in connector, DC version |
| GTIN (EAN) | 4050118225723 | |
| Qty. | 1 ST | |
| Type | PV-STICK+ VPE10 | Version |
| Order No. | 1303450000 | Photovoltaics, Plug-in connector, DC version |
| GTIN (EAN) | 4050118102468 | |
| Qty. | 10 ST | |
| Type | PV-STICK+ VPE200 | Version |
| Order No. | 1303470000 | Photovoltaics, Plug-in connector, DC version |
| GTIN (EAN) | 4050118102543 | |
| Qty. | 200 ST | |
| Type | PV-STICK+ VPE50 | Version |
| Order No. | 1303460000 | Photovoltaics, Plug-in connector, DC version |
| GTIN (EAN) | 4050118102383 | |
| Qty. | 50 ST | |
| Type | PV-STICK- VPE10 | Version |
| Order No. | 1303490000 | Photovoltaics, Plug-in connector, DC version |
| GTIN (EAN) | 4050118102529 | |
| Qty. | 10 ST | |
| Type | PV-STICK- VPE200 | Version |
| Order No. | 1303510000 | Photovoltaics, Plug-in connector, DC version |
| GTIN (EAN) | 4050118102390 | |
| Qty. | 200 ST | |
| Type | PV-STICK- VPE50 | Version |
| Order No. | 1303500000 | Photovoltaics, Plug-in connector, DC version |
| GTIN (EAN) | 4050118102536 | |
| Qty. | 50 ST | |