

**VPUM2I2SXXFXV101TXPX10****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



PV Protect is the solution for optimum protection of the inverter against overvoltages. The ready-to-connect boxes are available for different system voltages and can be supplied with various arrester types and MPP trackers. Depending on requirements, connection is made via cable glands or WM4C connectors with convenient and reliable PUSH IN connection technology.

**General ordering data**

|            |  |
|------------|--|
| Version    | Surge protection, 2 MPP's, Surge protection I / II, WM4C, 1000 V |
| Order No.  | <a href="#">2764150000</a>                                       |
| Type       | VPUM2I2SXXFXV101TXPX10   |
| GTIN (EAN) | 4064675016120  |
| Qty.       | 1 pc(s).   |

## VPUM2I2SXXFXV101TXPX10

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Dimensions and weights

|            |         |                 |            |
|------------|---------|-----------------|------------|
| Depth      | 91 mm   | Depth (inches)  | 3.583 inch |
| Height     | 160 mm  | Height (inches) | 6.299 inch |
| Width      | 168 mm  | Width (inches)  | 6.614 inch |
| Net weight | 1,008 g |                 |            |

## Temperatures

|                     |                       |                       |                |
|---------------------|-----------------------|-----------------------|----------------|
| Storage temperature | -40 °C...85 °C        | Operating temperature | -40 °C...85 °C |
| Humidity            | 5 - 95% rel. humidity |                       |                |

## Approvals and norms

|           |             |
|-----------|-------------|
| Approvals | EN 50539-11 |
|-----------|-------------|

## Enclosure

|                               |           |                      |   |
|-------------------------------|-----------|----------------------|---|
| Connection type string        | Plug WM4C | Enclosure attachment | Via the four holes under the cover screws |
| Switch disconnecter execution | no switch |                      |   |

## General data

|                   |      |
|-------------------|------|
| Protection degree | IP67 |
|-------------------|------|

## Inputs

|                                |                                   |                         |                       |
|--------------------------------|-----------------------------------|-------------------------|-----------------------|
| Amount of maximum power points | 2 MPP                             |                         |                       |
| DC Input + & -                 | Wire connection                   | Type of connection      | WM4 C field connector |
|                                | Cable entry                       | Number of cable entries | 2                     |
| Functional earth connector     | Cable entry                       | Number of cable entries | 1                     |
|                                | Wire connection                   | Type of connection      | PUSH IN               |
| Fuse type                      | Neither fuse cartridge nor holder |                         |                       |

## Surge protection DC side

|  |               |  |               |
|--|---------------|--|---------------|
| Conditions and requirements  | EN 50539-11   | Discharge current $I_n$ (8/20 $\mu$ s)             | 20 kA         |
| Discharge current, max. (8/20 $\mu$ s)                             | 40 kA         | Lightning test current $I_{imp}$ (10/350 $\mu$ s)  | 6.25 kA       |
| Maximum continuous operating voltage DC UCPV mode +/-, -/PE, +/-PE | 1,100 V       | Operating height in the grounded PV system         | $\leq 4000$ m |
| Operating height in ungrounded PV system                           | $\leq 4000$ m | PV system voltage, max. $U_{cpv}$                  | 1,100 V       |
| Protection level $U_p$ (+/-, -/PE, +/-PE)                          | $\leq 4,2$ kV | Requirements class                                 | Type I/II     |
| Short-circuit current $I_{SCP}$                                    | 11 kA         | Total discharge current $I_{total}$ (8/20 $\mu$ s) | 50 kA         |
| Total discharge current $I_{total}$ (10/350 $\mu$ s)               | 12.5 kA       |  |               |

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC000941    | ETIM 7.0    | EC000941    |
| ETIM 8.0    | EC000941    | ETIM 9.0    | EC000941    |
| ECLASS 9.1  | 27-13-08-05 | ECLASS 10.0 | 27-13-08-05 |
| ECLASS 11.0 | 27-13-08-05 | ECLASS 12.0 | 27-17-90-90 |
| ECLASS 13.0 | 27-17-90-90 |             |             |

Creation date May 2, 2024 1:05:23 AM CEST

## VPUM2I2SXFV101TXPX10

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)

## Technical data

### Tender specification sheets

#### Long specification

Designation 2: VPU PV  
BOX WM4 I+II 5 1000  
2M Over voltage protec-  
tion box for inverters with  
2Mpp tracker, used to pro-  
tect the DC side. Max.  
String voltage Uoc: 1000  
V MPPT1: 1 input, con-  
nection via WM4 C plug-  
in connector, compati-  
ble with cable type TÜV  
2 Pfg 1169/08.07 / EN  
50618:2069 MPPT 2  
is identical to MPPT 1  
Connection of the box in  
stitch without DC switch  
2 surge protection type II  
Connection of function-  
al earth via cable glands  
(8-12mmØ) cable cross-  
section: 16mm² Protection  
class: IP65 and IP67 Plas-  
tic enclosure Dimensions  
HxWxD: 168x160x91  
mm According to stan-  
dard, EN 50539-11:  
2013+A1:2014 IEC  
61643-31: 2018

### Important note

#### Product information

The SPD in the box cannot be replaced.

### Approvals

#### Approvals



#### ROHS

Conform

### Downloads

#### Approval/Certificate/Document of Con- formity

[PV Protect EU Declaration of Conformity](#)

#### User Documentation

[Manual PV Protect T1](#)

#### Catalogues

[Catalogues in PDF-format](#)

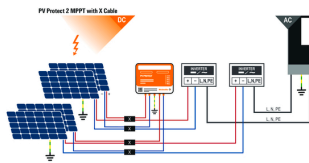
## VPUM2I2SXFV101TXPX10

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

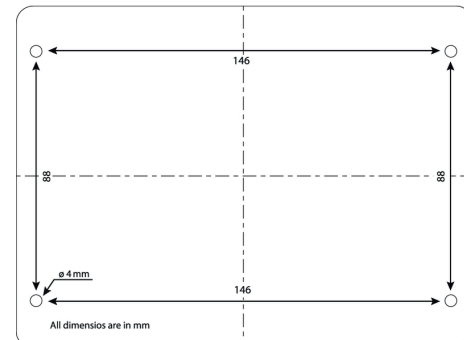
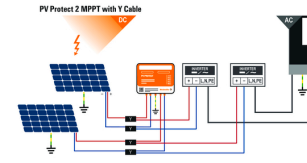
[www.weidmueller.com](http://www.weidmueller.com)

## Drawings

## Connection diagram



## Connection diagram



| VPUM2I2SXFV101TXPX10 |                       |  |  |  |  |  |  |  |                       |
|----------------------|-----------------------|--|--|--|--|--|--|--|-----------------------|
| <b>Series</b>        | PVN = PV Next         |  |  |  |  |  |  |  | <b>Voltage</b>        |
|                      | VPU = PV Protect      |  |  |  |  |  |  |  | 10 = 1kV              |
|                      |                       |  |  |  |  |  |  |  | 11 = 1.1kV            |
|                      |                       |  |  |  |  |  |  |  | 15 = 1.5kV            |
| <b>Level</b>         | 1 = DC trunk box (L1) |  |  |  |  |  |  |  | <b>Powersupply</b>    |
|                      |                       |  |  |  |  |  |  |  | x = n/a               |
| <b>Series</b>        | 1 = 1 MPPT supported  |  |  |  |  |  |  |  | <b>Monitoring</b>     |
|                      | 2 = 2 MPPT supported  |  |  |  |  |  |  |  | x = n/a               |
|                      | 3 = 3 MPPT supported  |  |  |  |  |  |  |  | <b>Output Type</b>    |
|                      | 4 = 4 MPPT supported  |  |  |  |  |  |  |  | 0 = GG                |
|                      | 6 = 6 MPPT supported  |  |  |  |  |  |  |  | 1 = VVWAC             |
|                      |                       |  |  |  |  |  |  |  | 2 = MCA-5m 2'         |
| <b>Inputs</b>        | 1...12 inputs         |  |  |  |  |  |  |  | <b>SPD</b>            |
|                      |                       |  |  |  |  |  |  |  | 0 = TYP II            |
| <b>Switch</b>        | x = n/a               |  |  |  |  |  |  |  | 1 = TYP I-II          |
|                      | 0 = manual switch     |  |  |  |  |  |  |  | X = No SPD            |
|                      | 1 = remote switch     |  |  |  |  |  |  |  | <b>Fuses</b>          |
|                      |                       |  |  |  |  |  |  |  | x = n/a               |
|                      |                       |  |  |  |  |  |  |  | 3 = only fuse holders |

**VPUM2I2SXXV101TXPX10****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Crosshead screwdriver Phillips**

Crosshead screwdriver, Phillips, SDK PH DIN 5262, ISO 8764/2-PH, output to ISO 8764-PH, ChromTop tip, SoftFinish grip

**General ordering data**

|            |                            |                          |
|------------|----------------------------|--------------------------|
| Type       | SDK PH2                    | Version                  |
| Order No.  | <a href="#">9008490000</a> | Screwdriver, Screwdriver |
| GTIN (EAN) | 4032248056484              |                          |
| Qty.       | 1 pc(s).                   |                          |

**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.  | <a href="#">1254870000</a> | Photovoltaics, Flat design               |
| GTIN (EAN) | 4050118047479              |  |
| Qty.       | 100 pc(s).                 |  |
| Type       | SAFETY-CLIP WM4 VPE10      | Version                                  |
| Order No.  | <a href="#">1328150000</a> | Photovoltaics, Accessories, Locking clip |
| GTIN (EAN) | 4050118238631              |  |
| Qty.       | 10 pc(s).                  |  |

## VPUM2I2SXFV101TXPX10

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Accessories

## 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

## General ordering data

|            |                            |                                  |
|------------|----------------------------|----------------------------------|
| Type       | MULTI-STRIPAX PV           | Version                          |
| Order No.  | <a href="#">1190490000</a> | Photovoltaics, Plug-in connector |
| GTIN (EAN) | 4032248973262              |                                  |
| Qty.       | 1 pc(s).                   |                                  |

## ... for photovoltaic plug-in connectors



After stripping the insulation, a suitable contact or wire end ferrule can be crimped onto the end of the cable. Crimping forms a secure connection between conductor and contact and has largely replaced soldering. Crimping denotes the creation of a homogeneous, permanent connection between conductor and connecting element. The connection can be made only with high-quality precision tools. The result is a secure and reliable connection both in mechanical and electrical terms. Weidmüller offers a wide range of mechanical crimping tools. Integral ratchets with release mechanisms guarantee optimum crimping. Crimped connections made with Weidmüller tools comply with international standards and regulations.

## General ordering data

|            |                            |   |
|------------|----------------------------|---|
| Type       | CTF PV WM4                 | Version   |
| Order No.  | <a href="#">1222870000</a> | Photovoltaics, Crimping tool for photovoltaic contacts, Mechanical, |
| GTIN (EAN) | 4050118006254              | without interchangeable inserts                                     |
| Qty.       | 1 pc(s).                   |   |

## VPUM2I2SXXFXV101TXPX10

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

- 1.500 V DC (DE) / 1,500 V DC (EN)
- PUSH 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.  | <a href="#">1422030000</a> | Photovoltaics, Plug-in connector, PUSH IN connection, male, female |
| GTIN (EAN) | 4050118225723              |  |
| Qty.       | 1 pc(s).                   |  |
| Type       | PV-STICK- VPE10            | Version  |
| Order No.  | <a href="#">1303490000</a> | Photovoltaics, Plug-in connector, PUSH IN connection, male         |
| GTIN (EAN) | 4050118102529              |  |
| Qty.       | 10 pc(s).                  |  |
| Type       | PV-STICK+ VPE10            | Version  |
| Order No.  | <a href="#">1303450000</a> | Photovoltaics, Plug-in connector, PUSH IN connection, female       |
| GTIN (EAN) | 4050118102468              |  |
| Qty.       | 10 pc(s).                  |  |

### X-Connector Cables



The Y or X cable is used to connect three or four elements of a PV system, such as the connection between PV panels, inverters and surge protection boxes. The cables are available in different connection variants.

### General ordering data

|            |                            |  |
|------------|----------------------------|--|
| Type       | PVHXW+W+PXXX06M-15         | Version  |
| Order No.  | <a href="#">2814290000</a> | Photovoltaics, X-Connector Cable, 2x WM4 C Female, 1x Partly |
| GTIN (EAN) | 4064675298977              | stripped cable end, 1x WM4 C Male, 6mm <sup>2</sup> , 1500 V |
| Qty.       | 1 pc(s).                   |  |

## VPUM2I2SXXFXV101TXPX10

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Accessories

|            |                            |   |
|------------|----------------------------|---|
| Type       | PVHXW-W-PXXX06W+15         | Version   |
| Order No.  | <a href="#">2814280000</a> | Photovoltaics, X-Connector Cable, 2x WM4 C Male, 1x Partly stripped |
| GTIN (EAN) | 4064675298960              | cable end, 1x WM4 C Female, 6mm², 1500 V                            |
| Qty.       | 1 pc(s).                   |   |
| Type       | PVHXM+M+W-XX06M-15         | Version   |
| Order No.  | <a href="#">2814270000</a> | Photovoltaics, X-Connector Cable, 2x MC4 Female, 1x WM4 C Male,     |
| GTIN (EAN) | 4064675298953              | 1x MC4 Male, 6mm², 1000 V   |
| Qty.       | 1 pc(s).                   |   |
| Type       | PVHXW-W-W+XX06W+15         | Version   |
| Order No.  | <a href="#">2814240000</a> | Photovoltaics, X-Connector Cable, 2x WM4 C Male, 2x WM4 C           |
| GTIN (EAN) | 4064675298922              | Female, 6mm², 1500 V  |
| Qty.       | 1 pc(s).                   |   |
| Type       | PVHXM-M-W+XX06M+15         | Version   |
| Order No.  | <a href="#">2814260000</a> | Photovoltaics, X-Connector Cable, 2x MC4 Male, 1x WM4 C Female,     |
| GTIN (EAN) | 4064675298946              | 1x MC4 Female, 6mm², 1000 V   |
| Qty.       | 1 pc(s).                   |   |
| Type       | PVHXW+W+W-XX06W-15         | Version   |
| Order No.  | <a href="#">2814250000</a> | Photovoltaics, X-Connector Cable, 2x WM4 C Female, 2x WM4 C         |
| GTIN (EAN) | 4064675298939              | Male, 6mm², 1500 V  |
| Qty.       | 1 pc(s).                   |   |

## Y-Connector Cables



The Y or X cable is used to connect three or four elements of a PV system, such as the connection between PV panels, inverters and surge protection boxes. The cables are available in different connection variants.

## General ordering data

|            |                            |   |
|------------|----------------------------|---|
| Type       | PVHYM+XXW-XX06M-15         | Version   |
| Order No.  | <a href="#">2814210000</a> | Photovoltaics, Y-Connector Cable, 1x MC4 Female, 1x WM4 C Male,     |
| GTIN (EAN) | 4064675298892              | 1x MC4 Male, 6mm², 1000 V   |
| Qty.       | 1 pc(s).                   |   |
| Type       | PVHYW-XXPXXX06W+15         | Version   |
| Order No.  | <a href="#">2814220000</a> | Photovoltaics, Y-Connector Cable, 1x WM4 C Male, 1x Partly stripped |
| GTIN (EAN) | 4064675298908              | cable end, 1x WM4 C Female, 6mm², 1500 V                            |
| Qty.       | 1 pc(s).                   |   |
| Type       | PVHYW+XXW-XX06W-15         | Version   |
| Order No.  | <a href="#">2814190000</a> | Photovoltaics, Y-Connector Cable, 1x WM4 C Female, 2x WM4 C         |
| GTIN (EAN) | 4064675298878              | Male, 6mm², 1500 V  |
| Qty.       | 1 pc(s).                   |   |
| Type       | PVHYW-XXW+XX06W+15         | Version   |
| Order No.  | <a href="#">2814180000</a> | Photovoltaics, Y-Connector Cable, 1x WM4 C Male, 2x WM4 C           |
| GTIN (EAN) | 4064675298861              | Female, 6mm², 1500 V  |
| Qty.       | 1 pc(s).                   |   |

Creation date May 2, 2024 1:05:23 AM CEST

Catalogue status 20.04.2024 / We reserve the right to make technical changes.



**VPUM2I2SXXV101TXPX10****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Accessories**

| Type       | PVHYM-XXW+XX06M+15         | Version   |  |
|------------|----------------------------|---|--|
| Order No.  | <a href="#">2814200000</a> | Photovoltaics, Y-Connector Cable, 1x MC4 Male, 1x WM4 C Female, |  |
| GTIN (EAN) | 4064675298885              | 1x MC4 Female, 6mm <sup>2</sup> , 1000 V                        |  |
| Qty.       | 1 pc(s).                   |   |  |