

VPUM111SXXV101TXPX10**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, 1 MPP, Surge protection I / II, WM4C, 1000 V
Order No.	2764140000
Type	VPUM111SXXV101TXPX10
GTIN (EAN)	4064675016113
Qty.	1 pc(s).

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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	772 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
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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
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Inputs

Amount of maximum power points	1 MPP		
DC Input + & -	Wire connection	Type of connection	WM4C plug-in connector
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 μ s)	20 kA
Discharge current, max. (8/20 μ s)	40 kA	Lightning test current I_{imp} (10/350 μ s)	6.25 kA
Maximum continuous operating voltage DC UCPV mode +/-, -/PE, +/-PE	1,100 V	Operating height in the grounded PV system	≤ 4000 m
Operating height in ungrounded PV system	≤ 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 μ s)	50 kA
Total discharge current I_{total} (10/350 μ 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		

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www.weidmueller.com**Technical data****Tender specification sheets**

Long specification

Designation 2: VPU PV
BOX WM4 I-II 3 1000
1M Over voltage protec-
tion box for inverters with
1 Mpp tracker, used to
protect 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 Connec-
tion of the box in stitch
without DC switch 1
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

DownloadsApproval/Certificate/Document of Con-
formity[PV Protect EU Declaration of Conformity](#)

User Documentation

[Manual PV Protect T1](#)

Catalogues

[Catalogues in PDF-format](#)

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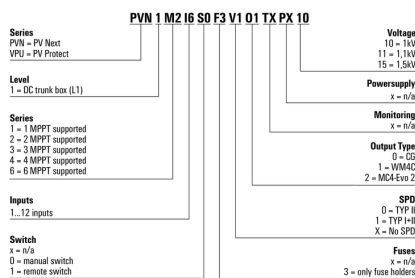
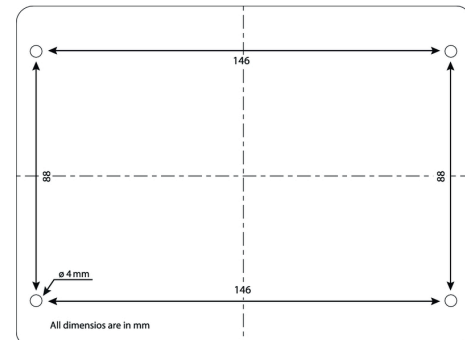
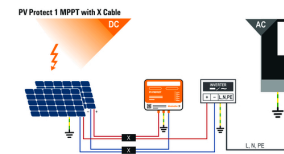
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Drawings

Connection diagram



Connection diagram



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Accessories

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	PVHXM-M-W+XX06M+15	Version
Order No.	2814260000	Photovoltaics, X-Connector Cable, 2x MC4 Male, 1x WM4 C Female,
GTIN (EAN)	4064675298946	1x MC4 Female, 6mm ² , 1000 V
Qty.	1 pc(s).	
Type	PVHXX+W+W-XX06W-15	Version
Order No.	2814250000	Photovoltaics, X-Connector Cable, 2x WM4 C Female, 2x WM4 C
GTIN (EAN)	4064675298939	Male, 6mm ² , 1500 V
Qty.	1 pc(s).	
Type	PVHXM+M+W-XX06M-15	Version
Order No.	2814270000	Photovoltaics, X-Connector Cable, 2x MC4 Female, 1x WM4 C Male,
GTIN (EAN)	4064675298953	1x MC4 Male, 6mm ² , 1000 V
Qty.	1 pc(s).	
Type	PVHXX-W-W+XX06W+15	Version
Order No.	2814240000	Photovoltaics, X-Connector Cable, 2x WM4 C Male, 2x WM4 C
GTIN (EAN)	4064675298922	Female, 6mm ² , 1500 V
Qty.	1 pc(s).	
Type	PVHXX-W-PXXX06W+15	Version
Order No.	2814280000	Photovoltaics, X-Connector Cable, 2x WM4 C Male, 1x Partly stripped
GTIN (EAN)	4064675298960	cable end, 1x WM4 C Female, 6mm ² , 1500 V
Qty.	1 pc(s).	
Type	PVHXX+W+PXXX06M-15	Version
Order No.	2814290000	Photovoltaics, X-Connector Cable, 2x WM4 C Female, 1x Partly
GTIN (EAN)	4064675298977	stripped cable end, 1x WM4 C Male, 6mm ² , 1500 V
Qty.	1 pc(s).	

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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.	1422030000	Photovoltaics, Plug-in connector, PUSH IN connection, male, female
GTIN (EAN)	4050118225723	
Qty.	1 pc(s).	
Type	PV-STICK- VPE10	Version
Order No.	1303490000	Photovoltaics, Plug-in connector, PUSH IN connection, male
GTIN (EAN)	4050118102529	
Qty.	10 pc(s).	
Type	PV-STICK+ VPE10	Version
Order No.	1303450000	Photovoltaics, Plug-in connector, PUSH IN connection, female
GTIN (EAN)	4050118102468	
Qty.	10 pc(s).	

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.	9008490000	Screwdriver, Screwdriver
GTIN (EAN)	4032248056484	
Qty.	1 pc(s).	

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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.	1190490000	Photovoltaics, Plug-in connector
GTIN (EAN)	4032248973262	
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	SAFETY-CLIP WM4 VPE10	Version
Order No.	1328150000	Photovoltaics, Accessories, Locking clip
GTIN (EAN)	4050118238631	
Qty.	10 pc(s).	

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

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General ordering data

Type	PVHYM-XXW+XX06M+15	Version
Order No.	2814200000	Photovoltaics, Y-Connector Cable, 1x MC4 Male, 1x WM4 C Female,
GTIN (EAN)	4064675298885	1x MC4 Female, 6mm ² , 1000 V
Qty.	1 pc(s).	
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 pc(s).	
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 pc(s).	
Type	PVHYM+XXW-XX06M-15	Version
Order No.	2814210000	Photovoltaics, Y-Connector Cable, 1x MC4 Female, 1x WM4 C Male,
GTIN (EAN)	4064675298892	1x MC4 Male, 6mm ² , 1000 V
Qty.	1 pc(s).	
Type	PVHYW-XXPXX06W+15	Version
Order No.	2814220000	Photovoltaics, Y-Connector Cable, 1x WM4 C Male, 1x Partly stripped
GTIN (EAN)	4064675298908	cable end, 1x WM4 C Female, 6mm ² , 1500 V
Qty.	1 pc(s).	

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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.	1222870000	Photovoltaics, Crimping tool for photovoltaic contacts, Mechanical,
GTIN (EAN)	4050118006254	without interchangeable inserts
Qty.	1 pc(s).	