

VPUM111SXFV101TXPX10

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. It is very compact and only requires Y-cables to connect to the PV strings. So it is a perfect product to retrofit existing PV residential installations with overvoltage protection.

General ordering data

Version	Surge protection, 1 MPP, Surge protection I / II, WM4C, 1000 V
Order No.	2764140000
Type	VPUM111SXFV101TXPX10
GTIN (EAN)	4064675016113
Qty.	1 items
Delivery status	This article will no longer be available in the future.
Available until	2026-03-31T00:00:00+02:00
Alternative product	PVI DC 1I 1O 1MPP SPD1 MC4 10

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Technical data

Approvals

Approvals



ROHS Conform

Dimensions and weights

Depth	91 mm	Depth (inches)	3.5827 inch
Height	160 mm	Height (inches)	6.2992 inch
Width	168 mm	Width (inches)	6.6142 inch
Net weight	772 g		

Temperatures

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

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

Approvals and norms

Approvals	EN 50539-11
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Enclosure

Enclosure attachment	Via the four holes under the cover screws	Connection type string	Plug WM4C
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General data

Standards	EN 50539-11	Protection degree	IP67
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Inputs

Amount of maximum power points (MPP)	1 MPP		
Functional earth connector	Cable entry	Number of cable entries	1
	Wire connection	Type of connection	PUSH IN
DC Input + & -	Wire connection	Type of connection	WM4C plug-in connector
	Fuse type Neither fuse cartridge nor holder		
Number of string inputs per MPP	1		

Surge protection DC side

Standards	EN 50539-11	Lightning test current limp (10/350 μs)	6.25 kA
Discharge current, max. (8/20 μs)	40 kA	Protection level Up (+/- , -/PE , +/PE)	≤4,2 kV
Conditions and requirements	EN 50539-11	Operating height in ungrounded PV system	≤ 4000 m
Short-circuit current ISCPV	11 kA	Total discharge current Itotal (8/20μs)	50 kA

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Discharge current I_n (8/20 μ s)	20 kA	Requirements class	Type I/II
Operating height in the grounded PV system	\leq 4000 m	Total discharge current I_{total} (10/350 μ s)	12.5 kA
PV system voltage, max. U_{cpv}	1100 V	Maximum continuous operating voltage DC UCPV mode +/-, -/PE, +/PE	1100 V

Important note

Product information The SPD in the box cannot be replaced.

Classifications

ETIM 8.0	EC001457	ETIM 9.0	EC001457
ETIM 10.0	EC001457	ECLASS 14.0	27-17-14-03
ECLASS 15.0	27-17-14-03		

Tender specification sheets

Long specification Designation 2: VPU PV BOX WM4 I+II 3 1000 1M
 Over voltage protection box for inverters with 1 Mpp tracker, used to protect the DC side.
 Max. String voltage U_{oc} : 1000 V MPPT1: 1 input, connection via WM4 C plug-in connector, compatible with cable type TÜV 2 Pfg 1169/08.07 / EN 50618:2069
 Connection of the box in stitch without DC switch 1 surge protection type II Connection of functional earth via cable glands (8-12mm \emptyset) cable cross-section: 16mm² Protection class: IP65 and IP67 Plastic enclosure Dimensions HxWxD: 168x160x91 mm According to standard, EN 50539-11: 2013+A1:2014 IEC 61643-31: 2018

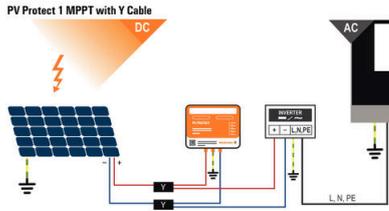
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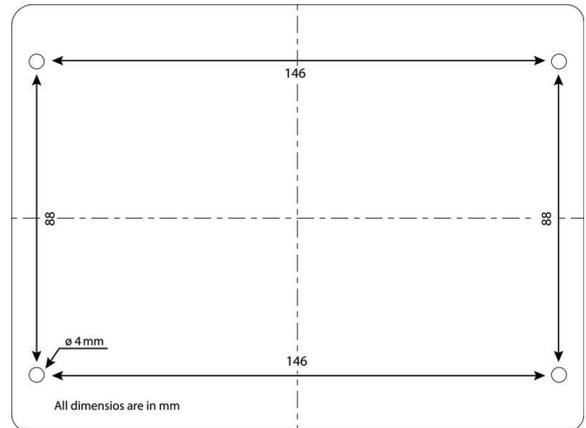
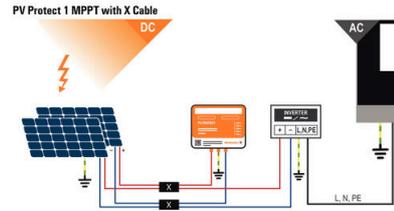
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Drawings

Connection diagram



Connection diagram



Series PVN = PV Next VPU = PV Protect	Voltage 10 = 1kV 11 = 1,1kV 15 = 1,5kV
Level 1 = DC trunk box (L1)	Powersupply x = n/a
Series 1 = 1 MPPT supported 2 = 2 MPPT supported 3 = 3 MPPT supported 4 = 4 MPPT supported 6 = 6 MPPT supported	Monitoring x = n/a
Inputs 1...12 inputs	Output Type 0 = CG 1 = WM4C 2 = MC4-Evo 2
Switch x = n/a 0 = manual switch 1 = remote switch	SPD 2/0 = TYP II 1 = TYP I+II X = No SPD
	Fuses x = n/a 3 = only fuse holders

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

... 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.

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Accessories

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 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

General ordering data

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

Accessories



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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 PV-STICK VP...	Version	
Order No.	1328150000	Photovoltaics, Accessories, Locking clip	
GTIN (EAN)	4050118238631		
Qty.	10 ST		

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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 "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- VPE10	Version
Order No.	1303490000	Photovoltaics, Plug-in connector, DC version
GTIN (EAN)	4050118102529	
Qty.	10 ST	

X-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	PVHXM+M+W-XX06M-11	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 ST	

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Type	PVHXM-M-W+XX06M+11	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 ST	
Type	PVHXW+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 ST	
Type	PVHXW-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 ST	
Type	PVHXW-W-PXXX06W+15	Version
Order No.	2814280000	Photovoltaics, X-Connector Cable, 2x WM4 C Male, 1x Partly stripped
GTIN (EAN)	4064675298960	1x cable end, 1x WM4 C Female, 6mm ² , 1500 V
Qty.	1 ST	
Type	PVHXW+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 ST	

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General ordering data

Type	PVHYM+XXW-XX06M-11	Version
Order No.	2814210000	Photovoltaics, Y-Connector Cable, 1x MC4 Female, 1x WM4 C Male,
GTIN (EAN)	4064675298892	1x MC4 Male, 6mm ² , 1100 V
Qty.	1 ST	
Type	PVHYM-XXW+XX06M+11	Version
Order No.	2814200000	Photovoltaics, Y-Connector Cable, 1x MC4 Male, 1x WM4 C Female,
GTIN (EAN)	4064675298885	1x MC4 Female, 6mm ² , 1100 V
Qty.	1 ST	
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	
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	

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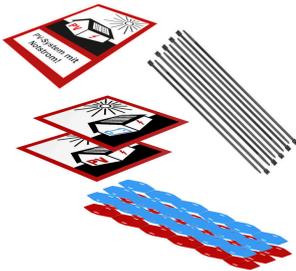
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Type	PVHYW-XXPXX06W+ 15	Version	
Order No.	2814220000		Photovoltaics, Y-Connector Cable, 1x WM4 C Male, 1x Partly stripped
GTIN (EAN)	4064675298908		cable end, 1x WM4 C Female, 6mm ² , 1500 V
Qty.	1 ST		

PV marking sets



General ordering data

Type	PV MARKER 1-3 MPP	Version	
Order No.	8000149520		Photovoltaics, Device markers, Accessories, Conductor and cable
GTIN (EAN)	4099987229197		markers, Cable ties, Marking set, Warning label, Cable marker, Self-
Qty.	1 ST		adhesive

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General ordering data

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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	

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X-Connector Cables



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The cables are available in different connection variants.

General ordering data

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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 ST	
Type	PVHXM-M-W+XX06M+11	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 ST	
Type	PVHXW+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 ST	
Type	PVHXW+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 ST	
Type	PVHXW-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 ST	

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Type	PVHYM+XXW-XX06M-11	Version
Order No.	2814210000	Photovoltaics, Y-Connector Cable, 1x MC4 Female, 1x WM4 C Male,
GTIN (EAN)	4064675298892	1x MC4 Male, 6mm ² , 1100 V
Qty.	1 ST	

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General ordering data

Type	PVHXW-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 ST		

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The cables are available in different connection variants.

General ordering data

Type	PVHYM-XXW+XX06M+11	Version	
Order No.	2814200000	Photovoltaics, Y-Connector Cable, 1x MC4 Male, 1x WM4 C Female,	
GTIN (EAN)	4064675298885	1x MC4 Female, 6mm ² , 1100 V	
Qty.	1 ST		
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		
Type	PVHYW-XXPXXX06W+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 ST		
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		