

PVN1M1I6S0F3V100TXPX10

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

info@weidmueller.com

www.weidmueller.com



PV Next: PV-Next, PV generator junction box for combination of 1-6 strings (input and output side) and connection to the inverter. Intelligent innovative design individual for every customer application. Advanced overvoltage protection, optional fuses and switch-disconnectors for optimum operation and safety for the system. In addition, all PV generator junction boxes comply with IEC/EN 61439-2 for maximum reliability of each component.

General ordering data

Version	Photovoltaics, Combiner Box, 1000 V, 1 MPPT, 6 Inputs / 6 Outputs per MPPT, With fuse holder, Surge protection I / II, Switch disconnector, Cable gland
Order No.	2737530000
Type	PVN1M1I6S0F3V100TXPX10
GTIN (EAN)	4032248395552
Qty.	1 pc(s).

PVN1M1I6S0F3V100TPX10
Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

info@weidmueller.com
www.weidmueller.com
Technical data
Dimensions and weights

Depth	249 mm	Depth (inches)	9.803 inch
Height	330 mm	Height (inches)	12.992 inch
Width	488 mm	Width (inches)	19.213 inch
Net weight	6,453 g		

Temperatures

Ambient temperature	-25 °C...+50 °C	Humidity	5 - 90 %, no condensation
---------------------	-----------------	----------	---------------------------

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
------------	----------------

Guarantee

Time interval	5 years
---------------	---------

Electrical characteristics

Current per MPPT, max.	90 A			
Rated DC current per connection	Current per string, max.	76 A via PUSH IN terminal		
	Ambient temperature	-25 °C...+50 °C		
	Short-circuit at main output	Duration	10 h	
		Factor	1.25 * I _{nc}	
	Current per string, max.	90 A via screw terminal		
	Ambient temperature	-25 °C...+50 °C		
Short-circuit at main output	Factor	1.25 * I _{nc}		
	Rated DC voltage	1,000 V DC		
Switching disconnecter capacity	DC-PV1, IEC 60947-3			

Enclosure

Connection type String	Internal terminal (with cable gland feed-through)	Enclosure attachment	Via the four holes under the cover screws
Insulating material	Polyester glass-fibre reinforced, Polycarbonate	Switch disconnecter execution	switch in cover
Type of mounting	Wall mounting, 4 screws		

General data

Installation location	Protected outdoor area (>1 km from sea)	Protection degree	IP65
Standards	IEC 61439-2 ed 2.0, EN 61439-2:2011		

Inputs

Amount of Maximum Power Point Tracking	1 MPPT
Cartridge fuse	10 x 38 mm

PVN1M1I6S0F3V100TXPX10
Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

Technical data

DC Input + & -	Wire connection	Type of connection	PUSH IN
		Compatible cable cross-section	TÜV 2 Pfg 1169/08.07, EN 50618:2015, TÜV 2 Pfg 1169/08.07
		Wire cross-section, min.	2.5 mm ²
		Wire cross-section, max.	16 mm ²
Functional earth connector	Cable entry	Number of cable entries	1
		Cable diameter, min.	5
		Cable diameter, max.	10
		Cable glands	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
		Fuse type	Empty fuse holder
Fuse-link standard	IEC 60269-1, IEC 60269-6, gPV (EN 60269-6)		
Max. number of DC inputs	per Maximum Power Point Tracking 6 inputs connected in parallel		
Surge protection auxiliary contact	Cable entry	Cable diameter, min.	5
		Cable diameter, max.	10
		Cable glands	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

Outputs

DC Output + & -	Wire connection	Type of connection	PUSH IN
		Compatible cable cross-section	TÜV 2 Pfg 1169/08.07, EN 50618:2015
		Wire cross-section, min.	2.5 mm ²
		Wire cross-section, max.	16 mm ²
		Type of connection	Screw connection
		Compatible cable cross-section	TÜV 2 Pfg 1169/08.07, EN 50618:2015
		Wire cross-section, min.	2.5 mm ²
		Wire cross-section, max.	50 mm ²
Max. number of DC outputs	per Maximum Power Point Tracking 7 outputs connected in parallel		

PVN1M1I6S0F3V100TXPX10
Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

Technical data
info@weidmueller.com
www.weidmueller.com

 Maximum continuous operating voltage
 UCPV mode +/-, -/PE, +/-PE 1,100 V DC

 Protection level U_p (+/-, -/PE, +/-PE) ≤ 3.8 kV

 Protection level U_p (+/PE) ≤ 3.8 kV

Requirements class Type I/II

 Standards IEC 61439-2 ed 2.0, EN
 61439-2:2011

 Total discharge current I_{total} (8/20 μ s) 50 kA

Surge protection DC side

Discharge current I_n (8/20 μ s)	20 kA	Discharge current, max. (8/20 μ s)	20 kA
Lightning test current I_{imp} (10/350 μ s)	6.25 kA	Maximum continuous operating voltage UCPV mode +/-, -/PE, +/-PE	1,100 V DC
PV system voltage, max. U_{cpv}	1,100 V	Protection level U_p (+/-, -/PE, +/-PE)	≤ 3.8 kV
Protection level U_p (+/-)	≤ 3.8 kV	Protection level U_p (+/PE)	≤ 3.8 kV
Protection level U_p (-/PE)	≤ 3.8 kV	Requirements class	Type I/II
Short-circuit current I_{SCPv}	11,000 A	Standards	IEC 61439-2 ed 2.0, EN 61439-2:2011
Standby power consumption P_C	< 0.2 W	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	EC002928	ETIM 7.0	EC002928
ETIM 8.0	EC003857	ECLASS 9.0	22-57-92-03
ECLASS 9.1	22-57-02-90	ECLASS 10.0	22-57-02-90
ECLASS 11.0	22-57-02-92	ECLASS 12.0	22-57-02-92

PVN1M1I6S0F3V100TXPX10

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

info@weidmueller.com

www.weidmueller.com

Technical data

Tender specification sheets

Long specification

Combiner box for inverters with 1 Mpp tracker, used to protect the DC side. Max. String voltage Uoc:1000 V MPPT1: Up to 6 inputs, connected via M25 cable gland with 3x7mm Ø cable entry (for positive and negative one each) PUSH IN connection / 2.5 - 6mm² single-wire, multi-wire, with/without ferrule 12 Fuse holder (order fuses 10x38 separately) Up to 7 outputs, 1 of them via M25 cable gland (10-13mmØ) to screw terminal block 0.5mm² to 50mm² single-wire, multi-wire, with ferrule up to 35mm², the remaining 6 connections via M25 cable gland with 3x7mm Ø cable entry (for positive and negative one each) PUSH IN connection / 2.5 - 6mm² single-wire, multi-wire, with/without ferrule with DC switch 1 surge protection 1000 V type I + II with remote contact Connection of the signal contact via cable glands (8-12mmØ) max. cable cross-section: 1.5mm² Connection of functional earth via cable glands (8-12mmØ) cable cross-section: 16mm² Protection class: IP65 Plastic enclosure Dimensions HxWxD:488x330x249 mm According to standard, Low-voltage switchgear assemblies - Part 1: General specifications, (IEC 61439-1:2011), BS EN 61439-2:2011

Important note

Product information Fuses are not included

Approvals

Approvals



PVN1M1I6S0F3V100TPX10

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

info@weidmueller.com

www.weidmueller.com

Technical data

Downloads

Approval/Certificate/Document of Conformity	EU Declaration of Conformity	www.weidmueller.com
Engineering Data	CAD data – PV Next Schematic Diagram 6In6Out CAD data – STEP Application notes – Fact Sheet DE PV CB Wie man Gebäude gegen Blitzeinschläge schützt Application notes – Fact Sheet DE PV Wie man die Lebensdauer eines GAK verlängert Application notes – Fact Sheet DE PV CB Wann Sicherungen zu installieren sind Application notes – Fact Sheet DE CB PV NEXT Application notes – Fact Sheet EN PV CB When DC fuses are mandatory to install Application notes – Fact Sheet EN CB PV NEXT Application notes – Fact Sheet EN PV How to protect buildings against lightning strikes Application notes – Fact Sheet EN PV How to extend the life time of a Combiner Box	
Technical Documentation	Customer Drawing	
User Documentation	Manual PV Next String Combiner Box MANUAL PV NEXT IT/ES/FR	
Catalogues	Catalogues in PDF-format	

PVN1M1I6S0F3V100TXPX10

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

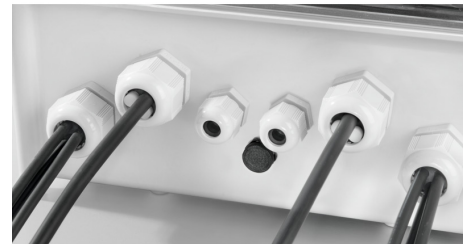
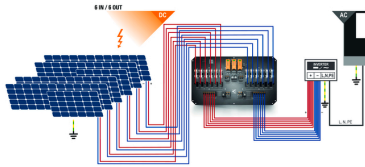
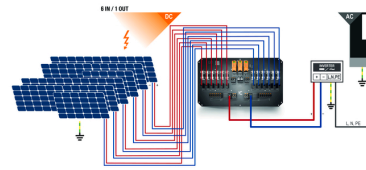
Tel. +49 5231 14-0

Fax. +49 5231 14-2083

info@weidmueller.com

Drawings

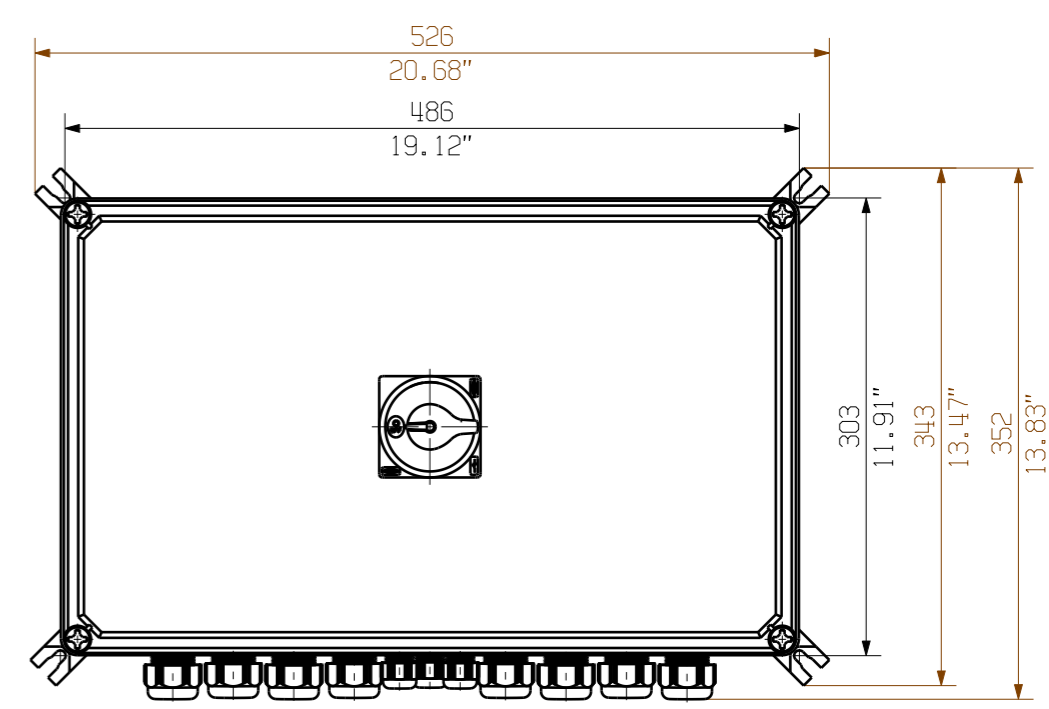
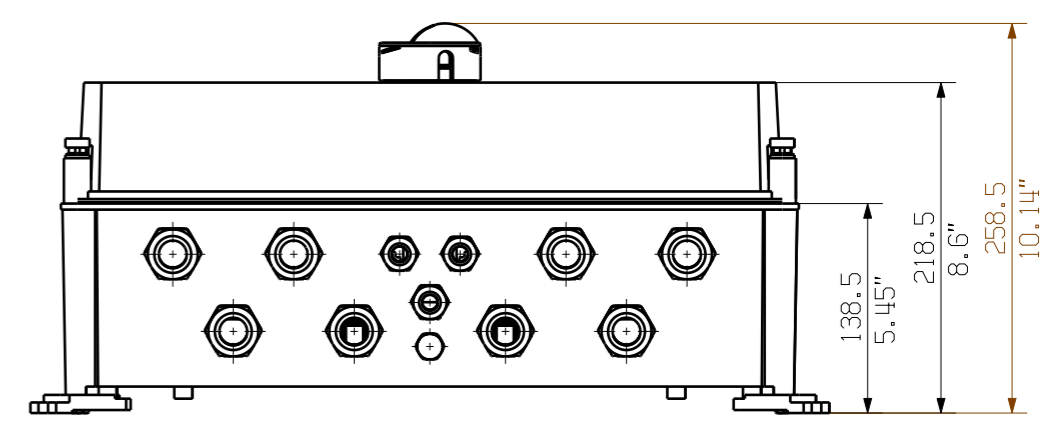
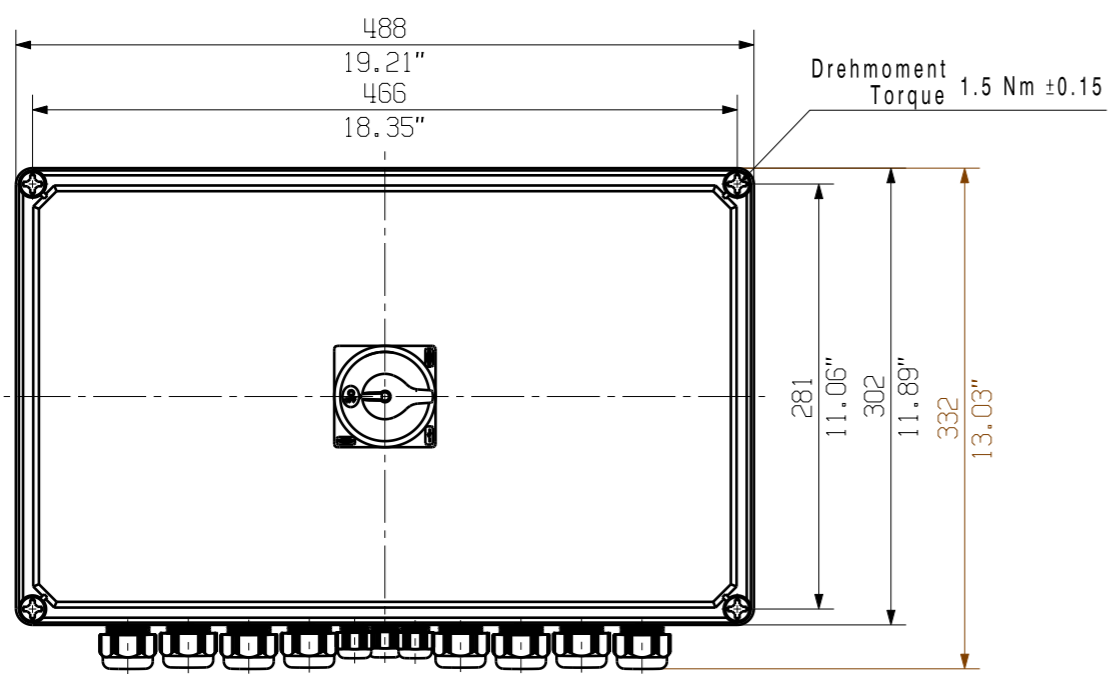
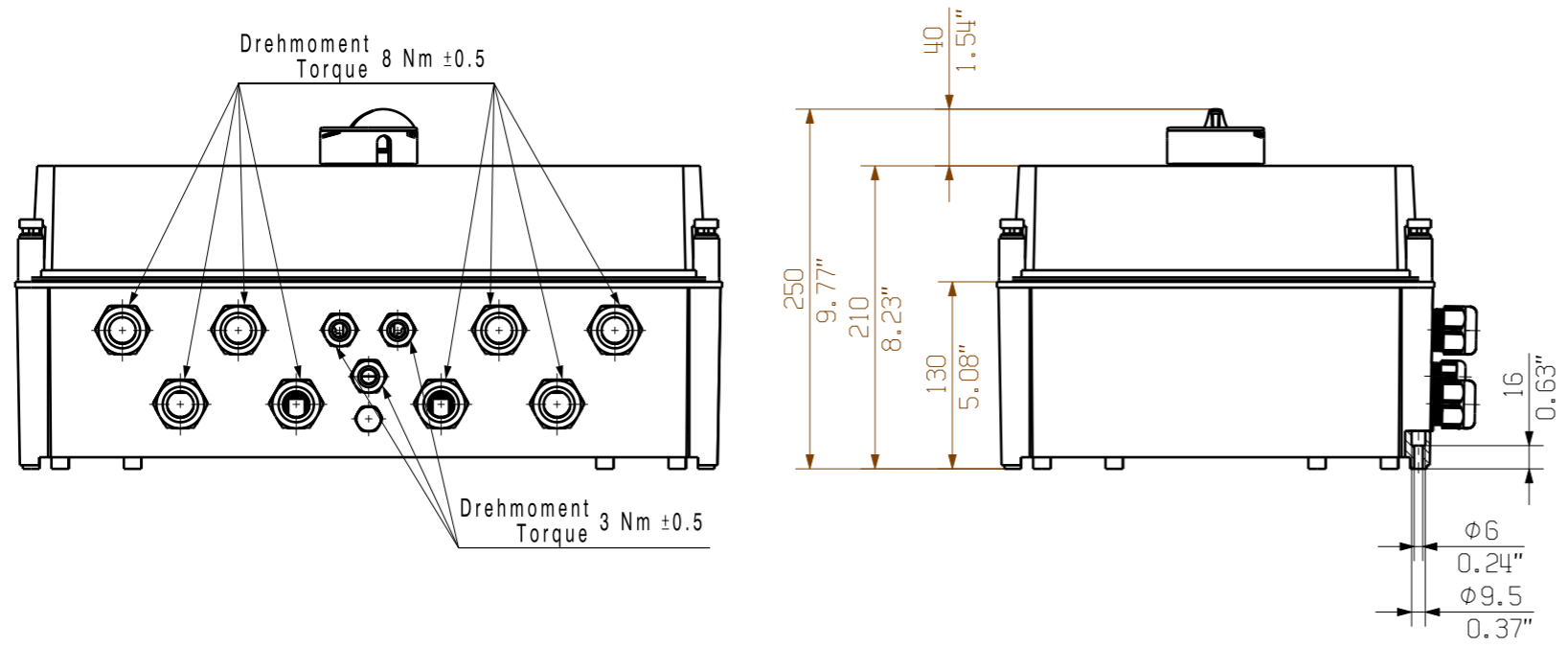
PCB design



PVN 1 M2 I6 S0 F3 V1 01 TX PX 10	
<p>Series PVN = PV Next VPU = PV Protect</p> <p>Level 1 = DC trunk box (L1)</p> <p>Series 1 = 1 MPPT supported 2 = 2 MPPT supported 3 = 3 MPPT supported 4 = 4 MPPT supported 6 = 6 MPPT supported</p> <p>Inputs 1..12 inputs</p> <p>Switch x = n/a 0 = manual switch 1 = remote switch</p>	<p>Voltage 10 = 1kV 11 = 1.1kV 15 = 1.5kV</p> <p>Power supply x = n/a</p> <p>Monitoring x = n/a</p> <p>Output Type 0 = EG 1 = VIMAC 2 = MCA-Exp 2</p> <p>SPD 0 = TYP II 1 = TYP I+II X = No SPD</p> <p>Fuses x = n/a 3 = only fuse holders</p>

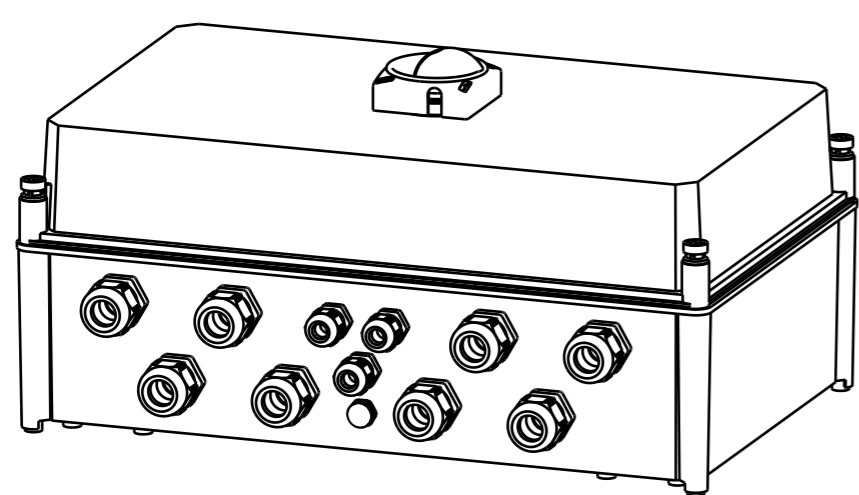
The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. Weidmüller exclusively reserves the right to file for patents, utility models or designs.

© Weidmüller Interface GmbH & Co. KG



Darstellung mit Zubehoer
Shown with accessory 0360800000 MF TBF

Nicht im Lieferumfang enthalten!
Not included in delivery!



First Issue Date 20.03.2020		Max. nos.		Prim PLM Part No.: 1230335		Prim ERP Part No.: 2737530000	
Modification		Date		Name		Weidmüller	
Scale: 1/5		Size: A3		Drawing no.		72116 0	
Drawing Customer		Date		Name		Sheet 03 of 03 sheets	
Approved		Date		Name		2737530000 PVN1M1I6S0F3V100TXPX10	
Product file:		Date		Name		Combinerbox Residential/Commercial Combinerbox Residential/Commercial	