



Product information as at: 6/2011

ENYSUN

Safe product solutions for Photovoltaic plants conforming to standards

Grid, on-grid and off-grid systems

Gustav Hensel GmbH & Co. KG
Industrial Electrical Power Distribution Systems

Altenhudem
Gustav-Hensel-Straße 6
D-57368 Lennestadt, Germany

P.O. Box 1461
D-57344 Lennestadt, Germany

Phone: +49 (0)27 23/6 09-0
Fax: +49 (0)27 23/6 00 52
E-Mail: info@hensel-electric.de
www.hensel-electric.de

- **PV Generator junction boxes**
- **Battery distributors**
- **Solar inverter collectors**

**For all application areas of the new standard
IEC 60 364-7-712 (Draft)**

These application areas for PV systems are now new IEC 60 364-7-712 (Draft):

Grid-connected PV systems

GRID system

PV system for grid support

"PV system for supply to an installation in parallel with a system for distribution of electricity to the public"

PV generator



PV generator junction boxes



Centralised solar inverters



Source: Kostal

Solar inverter collectors



ON-GRID system

PV system for consumer-oriented generation

"PV system for supply to an installation in parallel with a system for distribution of electricity to the public"

PV generator



PV generator junction boxes



String solar inverters



Source: SMA Solar Technology AG

Solar inverter collectors



Electrical installation or public power supply system

direct

D

A

alternating

specified by the

Stand-alone PV systems

OFF-GRID system

PV system **with energy storage**, not connected to the public power supply system

"PV system for supply to an installation which is not connected to a system for distribution of electricity to the public (**stand alone**)"

PV generator



PV generator junction boxes



Solar inverters



Solar inverter collectors



Electrical installation

Energy storage

Energy storage work

- in PV system for consumer-oriented production as an **alternative** to a system for distribution of electricity to the public
- and for **decentralized** supply to an electrical installation without a public supply network is available (off-grid system).

e.g. Battery



Battery distributors



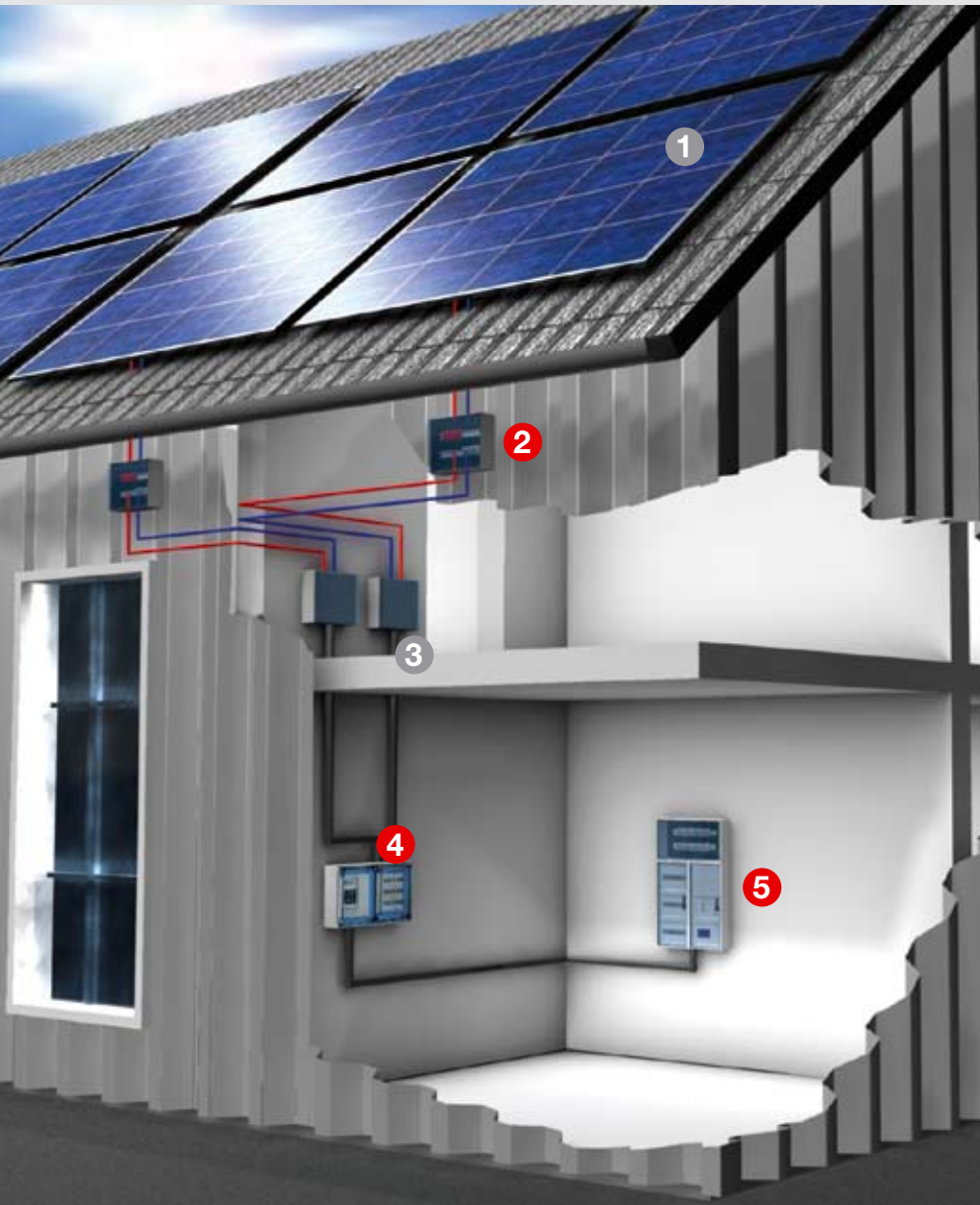
Stand-alone solar inverters



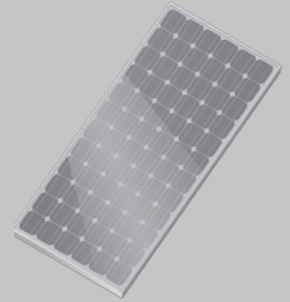
ENYSUN distributors of Hensel for DC and AC areas in PV systems work safely and in conformity to the new standard (Draft) in all application areas.

ENYSUN movie

Our ENYSUN product solutions provide you many advantages for the installation of photovoltaic plants. Learn more about ENYSUN in our product movie. Scan this QR code, then look at the ENYSUN movie on your phone.



1



PV generators

2



PV generator junction boxes

3



Solar inverter

4



PV Solar inverter collector

5



Disconnection, metering, over-current protection device

PV generator junction boxes



Connection:

Ready for connection with plug-in connectors

Electrical data:

Rated voltage: **DC 1,000 V**

Rated current: up to 400 A

Protective measure: **Total insulation** ☐

Ambient conditions:

UV resistant

Degree of protection: **IP 65**

Stainless steel external brackets optional: Combi climate glands to reduce condensation formation in outdoor installations.

(Order separately, see accessories).

PV Solar inverter collector



Complete set:

pre-fabricated and tested solar inverter collector solutions

Electrical data:

Rated voltage: AC 230/400 V

1~ Inverters up to 11 kW

3~ Inverters up to 33 kW

optional with surge arrester

Ambient conditions:

UV resistant

Degree of protection: **IP 65**

Protective measure: Total insulation ☐

Stainless steel external brackets optional: Combi climate glands to reduce condensation formation in outdoor installations.

(order separately, see accessories).

PV generator junction boxes with surge arrester or DC generator disconnect switch



KV PV 1211
1 x PV string for
1 x inverter input



KV PV 2211
1 x PV string for
1 x inverter input
1 x inverter input for
1 x grid



KV PV 2411 **new**
1 x PV string for
1 x inverter input



KV PV 1411
1 x PV string for
1 x inverter input

PV generator junction boxes with surge arrester



Mi PV 1111
1 x PV string for
1 x inverter input



Mi PV 1122
2 x PV string for
2 x inverter input



Mi PV 1133
3 x PV string for
3 x inverter input



Mi PV 1121
2 x PV string for
1 x inverter input



Mi PV 1242
4 x PV string for
2 x inverter input



Mi PV 1263
6 x PV string for
3 x inverter input

PV generator junction boxes with surge arrester and DC generator disconnect switch



Mi PV 2111
1 x PV string for
1 x inverter input



Mi PV 2222
2 x PV string for
2 x inverter input



Mi PV 2233
3 x PV string for
3 x inverter input



Mi PV 2121
2 x PV string for
1 x inverter input



Mi PV 2242
4 x PV string for
2 x inverter input



Mi PV 2263
6 x PV string for
3 x inverter input

PV generator junction boxes with string overload protection and DC generator disconnect switch



Mi PV 3611
12 x PV string for
1 x inverter input



Mi PV 3621
12 x PV string for
1 x inverter input
1 x DC surge arrester



Mi PV 3931
24 x PV string for
1 x inverter input



Mi PV 3941
24 x PV string for
1 x inverter input
1 x DC surge arrester



Mi PV 3311 **new**
6 x PV string for
1 x inverter input



Mi PV 3321 **new**
6 x PV string for
1 x inverter input
1 x DC surge arrester

PV generator junction boxes with string overload protection and ready for string monitoring



Mi PV 3781 **new**
8 x PV string for
1 x inverter input



Mi PV 3791 **new**
8 x PV string for
1 x inverter input
1 x DC surge arrester

PV generator junction boxes with string overload protection and DC generator disconnect switch



Mi PV 3731 **new**
3 x PV string for
1 x inverter input



Mi PV 3741 **new**
3 x PV string for
1 x inverter input
1 x DC surge arrester

PV generator junction boxes with blocking diodes and DC generator disconnect switch



Mi PV 4311
12 x PV string for
1 x inverter input



Mi PV 4321
12 x PV string for
1 x inverter input
1 x DC surge arrester



Mi PV 4631
24 x PV string for
1 x inverter input



Mi PV 4641
24 x PV string for
1 x inverter input
1 x DC surge arrester

See Hensel main catalogue for further extension boxes and accessories!

Battery distributors with disconnect switch and protective devices for outgoing circuits to solar inverters



Mi PV 3301 new
1 x Battery on
1 x Inverter



Mi PV 3802 new
1 x Battery on
2 x Inverter



Mi PV 3302 new
1 x Battery on
3 x Inverter

Battery distributors with protective devices for outgoing circuits to solar inverters



Mi PV 3101 new
1 x Battery on
1 x Inverter



Mi PV 3302 new
1 x Battery on
3 x Inverter

Solar inverter collectors



Mi PV 6111
Rated power 70 kW,
Connection of 1~ inverters



Mi PV 6311
Rated power 70 kW,
Connection of 3~ inverters



Mi PV 6123
Rated power 140 kW,
Connection of 1~ inverters



Mi PV 6323
Rated power 140 kW,
Connection of 3~ inverters



Mi PV 5112
Rated power 70 kW,
Connection of 1~ inverters



Mi PV 5312
Rated power 70 kW,
Connection of 3~ inverters



Mi PV 5124
Rated power 140 kW,
Connection of 1~ inverters



Mi PV 5324
Rated power 140 kW,
Connection of 3~ inverters



Mi PV 5123
Rated power 140 kW,
Connection of 1~ inverters



Mi PV 5323
Rated power 140 kW,
Connection of 3~ inverters



Mi PV 6211
Rated power 70 kW,
Connection of 1~ inverters
1 x AC surge arrester



Mi PV 6411
Rated power 70 kW,
Connection of 3~ inverters
1 x AC surge arrester



Mi PV 6223
Rated power 140 kW,
Connection of 1~ inverters
1 x AC surge arrester



Mi PV 6423
Rated power 140 kW,
Connection of 3~ inverters
1 x AC surge arrester



Mi PV 5212
Rated power 70 kW,
Connection of 1~ inverters
1 x AC surge arrester



Mi PV 5412
Rated power 70 kW,
Connection of 3~ inverters
1 x AC surge arrester



Mi PV 5224
Rated power 140 kW,
Connection of 1~ inverters
1 x AC surge arrester



Mi PV 5424
Rated power 140 kW,
Connection of 3~ inverters
1 x AC surge arrester



Mi PV 5223
Rated power 140 kW,
Connection of 1~ inverters
1 x AC surge arrester



Mi PV 5423
Rated power 140 kW,
Connection of 3~ inverters
1 x AC surge arrester

Customised solutions? Contact us!

Here comes the sun!

Photovoltaic plants installed quickly, in adherence with standards, and safely.



NEW

ENYSUN is here at last. Now there is no longer any problem selecting and installing photovoltaic plants safely. Hensel has the professional solution. ENYSUN, the safe photovoltaic distributors that comply with the standards, the plant is quickly, easily and safely installed, from the roof to the mains supply. Clear competitive advantages for you - from Hensel.

www.enysun.eu

08 17 0755 6.11/1/11

