

Opening up new perspectives for energy.  
PLATINUM® inverters,  
monitoring & energy management.



**PLATINUM®**  
Next Energy Solution.

Next Energy Solution.  
Welcome to PLATINUM®.

Dear PLATINUM® customers and partners,

A lot is happening in the photovoltaics market. On the one hand, more solar electricity is being generated than ever before. On the other hand, the focus and main players in the global competition are shifting. And one of these is PLATINUM®. Launched as a premium brand in 2006, PLATINUM® has been trading since April 2013 as an autonomous company belonging to the mutares AG, Munich. So what does this mean for you, our partners and customers?

Only good things! As the premium brand and company PLATINUM®, we will be able to do even more for you in the future. For example with excellent new R3 inverters that deliver one of the highest degree of efficiency in the industry, with impressive figures of up to 98.6 %. In addition, we now also offer even more training sessions and workshops from our new PLATINUM® PartnerCenter at our site in Wangen.

Above all, PLATINUM® stands out with new priorities in energy management – an area we focus on particularly in this catalogue.

But one thing remains unchanged: the exceptional quality of our solutions. Why is this? The answer is simple: the same PLATINUM® employees are working behind the scenes at the same site to deliver these solutions. And this is not going to change.

We have great plans. Please join us on our journey.

PLATINUM®



Klaus Frehner  
Managing Director PLATINUM GmbH  
Wangen im Allgäu, June 2013



# An independent player in the market. The company PLATINUM®

Originally set up by Diehl Controls, PLATINUM® is trading since 1st April 2013 as an autonomous company belonging to the mutares AG, Munich. So the premium brand from the Allgäu, Germany can distinguish and rise even more. But the same competent, effective and highly capable team is working behind the scenes. The inverters are still manufactured in the Allgäu by Diehl Controls while PLATINUM® develops and sells the inverters.

Therefore the product quality remains at the usual high standard while the strategic new realigned PLATINUM® will set their focus even more on intense consulting, service and training. Our promise: Next energy solution.



4-5	<b>Preface</b>
6	<b>Company</b>
8	<b>Energy management</b>
9	How energy management with PLATINUM® works
10-45	<b>Inverters</b>
12	PHOTON seal of approval
13	Maximised ratings and 100% yield
14	R3-S2 inverters
18	R3-M inverters
22	R3-M2 inverters
26	R3-6PACK inverters
30	TL inverters
38	H inverters
40	S inverters
44	SolarConfig Plus
46	References
50-57	<b>Monitoring</b>
52	WebMaster Pro
54	IOBox
55	Plant configuration
56	SolarPortal
60-65	<b>Energy management</b>
60	WebMaster Home
64	Battery
66-74	<b>Information and contact details</b>
66	PartnerCenter
70	Environmental management
72	Addresses

# How energy management works. And what you need for it.



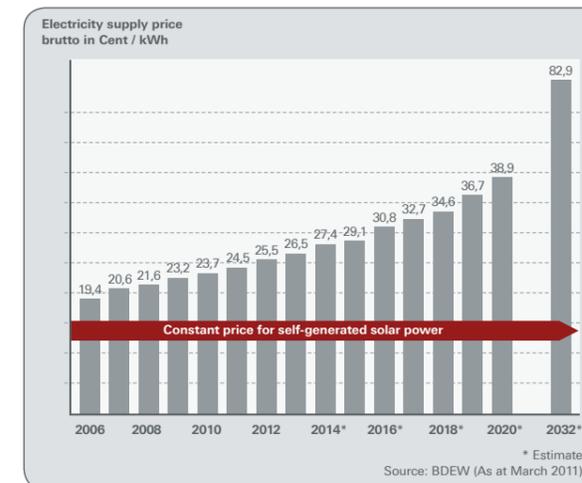
Energy is the topic of the future. More and more people are turning to renewable energy sources. For many, solar energy is the first choice. In 2012 alone, photovoltaic systems generated more than 28 terawatt hours of electric power\*. More than ever before – and on the rise.

Up to 30 % of daily consumption can be covered through direct use of self-generated solar electricity. And this figure rises to well above 60 % if storage systems are used.

All you need is just three components: a system on the roof with a high-performance inverter. A battery that will allow you to use the generated electricity during the evening and morning hours as well, when demand is at its peak. Plus a control system, which monitors and manages the energy flow.

In this way, photovoltaic systems pay for themselves – regardless of the status of the German Renewable Energy Sources Act or the current feed-in rebates. What is more, not only are solar electricity producers able to become independent from rising electricity prices, but they also make an active contribution to protecting the environment.

## Standard price developments – a comparison



While energy prices are constantly increasing, the costs associated with self-generated solar electricity remain constant.

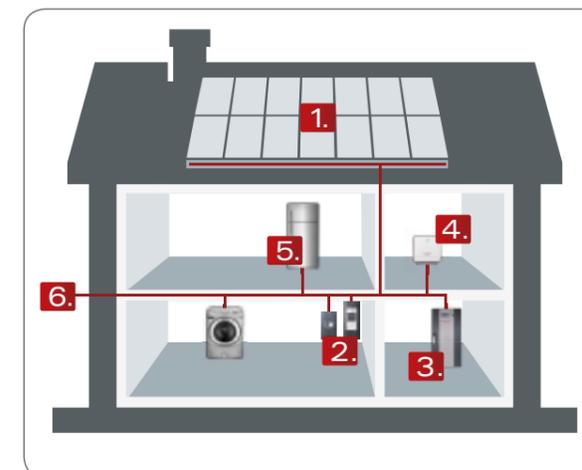


Solar modules on the roof, inverters in the cellar – these are the requirements for greater independence from electricity price developments.

## How energy management works:

**1. Solar modules** on the roof absorb solar energy and convert it into direct current (DC).

**2. The PLATINUM® inverter** then converts the direct energy into alternating current (AC) suitable for the grid. The converted electricity can then be directly used, stored or fed into the public grid.



**3. The PLATINUM® Battery** stores the electricity ready for use during the morning or evening.

**4. The PLATINUM® Webmaster Home** monitors and controls the energy consumption.

**5. Devices** are supplied with electricity by the PLATINUM® monitoring system as required with directly generated electricity, stored electricity or electricity supplied by the grid.

**6. Via the connection to the grid**, surplus solar electricity can be fed into the grid or remaining energy demands can be met.

## Delivering exceptional efficiency. The PLATINUM® range of inverters.



Tests have shown that PLATINUM® inverters achieve a peak efficiency of up to 98.6 % – including the R3 inverter, which is now available in two more variants. This makes them the best of their type. In addition, all PLATINUM® inverters offer outstanding quality and absolute reliability. In short, they deliver everything that counts in the world of photovoltaics.

The inverters offer comprehensive data information on the AC and DC side relating to current, voltage and current data. The yield values are recorded around the clock for the day, week, month and year and can be saved for 30 years via the integrated datalogger. Connection couldn't be easier thanks to our quick, fast installation and commissioning and the configuration of the entire PLATINUM® range as multi-country devices.

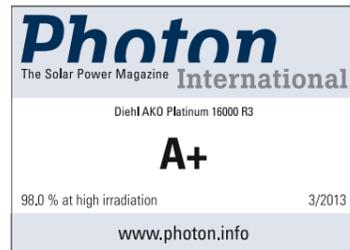
The PLATINUM® product range includes string inverters in the output class from 2 to 22 kW. We also offer inverters with single and three-phase feed-in, with or without a transformer. With devices in the protection classes IP 65 and IP 66 and the PowerBlock system, the PLATINUM® range also covers outdoor applications. Whether for a single-family detached house, a commercial roof-mounted system or free-field installations – PLATINUM® offers the right device for every requirement.

Tested and rated "A+".  
The PLATINUM® R3  
receives a seal of approval  
from PHOTON.

Only the best is in first place. The PLATINUM® R3 receives the Photon seal of approval with the rating "A+". The inverter test from PHOTON supports the PV system operators in their decision. The efficiency determined by PHOTON is tested under exacerbated circumstances. Anyone who makes the grade in this test is really good – just like the PLATINUM® R3.

The PHOTON test laboratory has been testing inverters since 2007. The PHOTON test takes all influencing factors, such as the input voltage range into account. That makes it comparable with other inverters. The test results are published in the PHOTON magazines on a regular basis.

After testing the PLATINUM® R3 and putting the 16000 R3-M inverter through its paces, the PHOTON test laboratory has determined an overall efficiency of 98.0 % in high irradiation conditions for the inverter from Wangen im Allgäu.

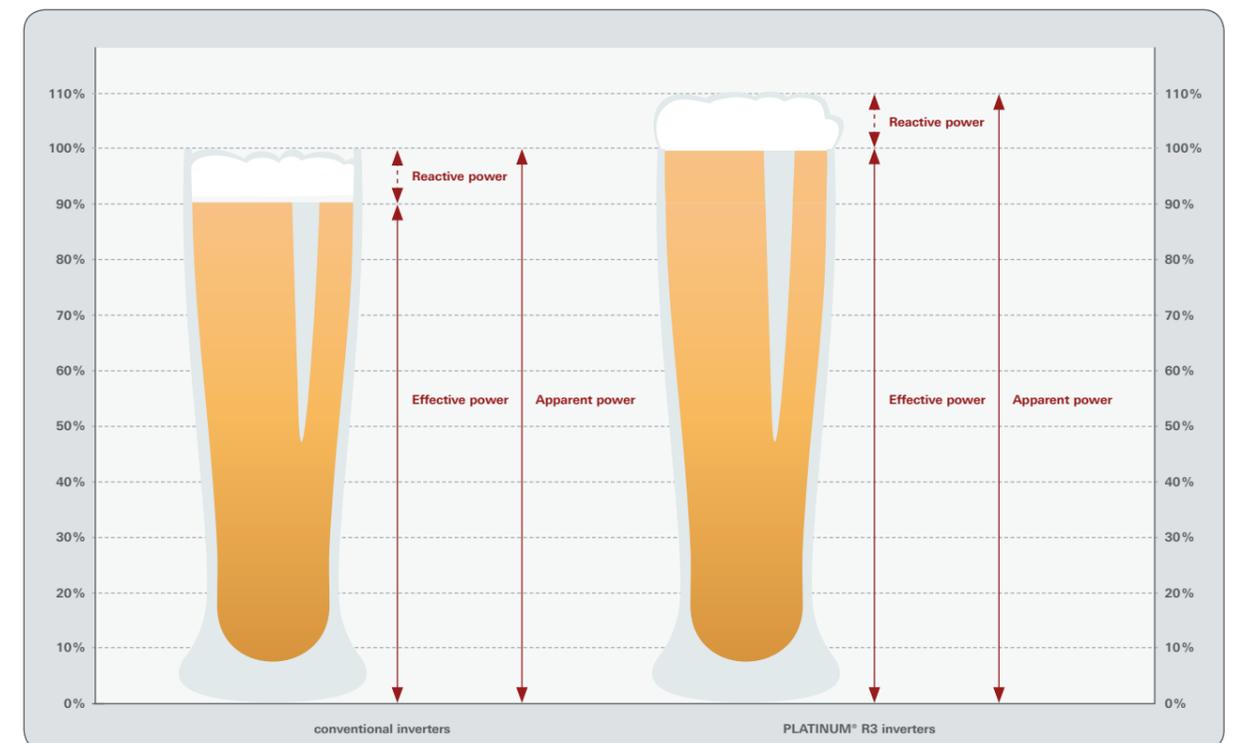


Maximised ratings  
and 100 % yield.  
Thanks to the 10 % increase  
in apparent power.

The apparent power is made up of the effective power and the required reactive power. To date, the effective power has been reduced by around 10 % in the case of a reactive power infeed. This resulted in reduced yields.

This is now a thing of the past – the latest R3 models come with a 10 % increase in apparent power as standard.

This ensures maximised ratings and 100 % yields – without the previous need to over-dimension the inverter.



## Excellent in small systems. The PLATINUM® R3-S2 inverter.



The transformerless high-performance inverter PLATINUM® R3-S2 is the ideal solution for privately owned photovoltaic systems. The little brother of the R3-M delivers an impressive peak efficiency of 98.5%. Thanks to its two boost trackers, it has a particularly advantageous MPP voltage range and offers maximum flexibility – for example, for connections to east-west roofs, dormer windows or garages. Just like all of the other R3 inverters, it offers IP 66 protection for use outdoors. Its passive ventilation reduces noise levels and maintenance requirements. The unit is easy to install, and master programming is performed automatically via the PLATINUM® network EIA 485. The graphics display shows all important operating data in a clearly legible display – even during the night. The range includes four models from 5 to 9 kW.

- Maximum efficiency 98.5%
- 2 MPP trackers for the utmost design flexibility
- DIVE® technology for increased efficiency in the lower power output range
- RAC-MPP® technology for rapid MPP tracking
- Pure convection cooling reduces maintenance requirements and noise levels
- Integrated datalogger provides storage capacity for 30 years worth of operating data
- Suitable for universal use thanks to multi-country configuration
- Maximised ratings in low-voltage plants thanks to 10% increase in apparent power
- Free 10-year manufacturer's warranty

Whether east-west, garage or dormer roof.  
The R3-S2 inverter is the perfect solution for tricky challenges.



The PLATINUM® R3-S is compliant with the "Energy management (§6 EEG)" market requirement specification and the "Low voltage directive AR-N 4105".



Even in non-standard irradiation scenarios like shading, inclined roofs and roofs facing different directions, the R3-S2 secures optimised yields due to its two flexible trackers.

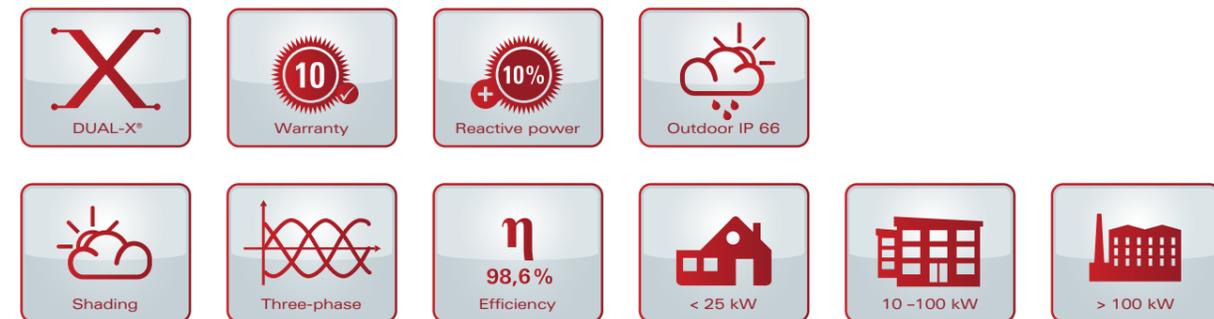
Specifications		
R3 inverter	5500 R3-S2	7000 R3-S2
<b>DC Input</b>		
Max. PV power	5,700 Wp	6,900 Wp
Max. DC power	5,200 W	6,250 W
MPPT voltage range	150 ... 720 V / 150 ... 720 V	
Max. input voltage	900 V	
Max. MPPT inout current	9.5 A / 9.5 A	
Number of string inputs	! / !	
Number of MPP trackers	2	
DC disconnect	●	
DC short circuit current	14 A / 14 A	
Reverse polarity protection / Ground fault monitoring (isolation check)	● / ●	
<b>AC Output</b>		
Rated power	5,000 W	6,000 W
Rated current	3 x 7.2 A	3 x 8.7 A
Max. apparent power	5,600 VA	6,700 VA
Max. AC current	3 x 9.9 A	3 x 11.9 A
Power feed starts at	20 W	
Mains output voltage	3AC 230 V / 400 V (+/-20 %)	
Feed in phases / connection phases	3 / 3	
Max. permitted grid impedance <sup>[Z<sub>max</sub>] (EN 61000-3-11)</sup>	-	
Standby consumption	1 W	
Mains frequency	50 Hz (+/-5 %)	
Power factor <sup>(cos phi) (ind ... cap)</sup>	0.7 ... 0.7	
Short circuit resistance/Ground fault monitoring (RCD)	● / ●	
<b>Interfaces</b>		
DC connection	MC4	
AC connection	Spring clamp connectors	
RS 485 (Clamps / RJ45)	● / ●	
Ethernet / CAN	- / -	
Integrated web server	-	
Alarm relay	-	
<b>Appliance data</b>		
Max. efficiency	98.5 %	
European efficiency	98.2 %	
Weight	37 kg	
Dimensions (H x W x D in mm)	626 x 547 x 290	
Operating temperature	-20 ... +60 °C	
Storage temperature	-25 ... +80 °C	
Relative humidity	0 ... 95 %	
Sound pressure level	< 32 dB (A)	
Protection degree (DIN EN 60529)	IP 66	
Protection class / overvoltage category	I / Type 3	
Full graphic display <sup>(color / monochrome)</sup>	- / ●	
Storage capacity data logger	30 years	
System topology	Transformerless	
Cooling	Convection	
Standards / grid codes	VDE 0126-1-1, VDE AR-N 4105, CEI 0-21, C10/11, G83/2, EN 50438, ÖNORM E8001-4-712, UTE C15-712-1, RD 1699/661, IEC 62109, AS 4777, AS 3100	
Warranty	10 years	
<b>Type designation</b>	<b>5500 R3-S2B</b>	<b>7000 R3-S2B</b>

Subject to alterations. Valid as of 01/2014. More than 45 countries are currently supported. The current list is available from the download area of our homepage [www.platinum-nes.com](http://www.platinum-nes.com)

Specifications		
R3 inverter	8000 R3-S2	9000 R3-S2
<b>DC Input</b>		
Max. PV power	8,000 Wp	9,100 Wp
Max. DC power	7,300 W	8,300 W
MPPT voltage range	150 ... 720 V / 150 ... 720 V	
Max. input voltage	900 V	
Max. MPPT inout current	9.5 A / 9.5 A	
Number of string inputs	1 / 1	
Number of MPP trackers	2	
DC disconnect	●	
DC short circuit current	14 A / 14 A	
Reverse polarity protection / Ground fault monitoring (isolation check)	● / ●	
<b>AC Output</b>		
Rated power	7,000 W	8,000 W
Rated current	3 x 10.1 A	3 x 11.6 A
Max. apparent power	7,800 VA	8,900 VA
Max. AC current	3 x 13 A	3 x 13.1 A
Power feed starts at	20 W	
Mains output voltage	3AC 230 V / 400 V (+/-20 %)	
Feed in phases / connection phases	3 / 3	
Max. permitted grid impedance <sup>[Z<sub>max</sub>] (EN 61000-3-11)</sup>	-	
Standby consumption	1 W	
Mains frequency	50 Hz (+/-5 %)	
Power factor <sup>(cos phi) (ind ... cap)</sup>	0.7 ... 0.7	
Short circuit resistance/Ground fault monitoring (RCD)	● / ●	
<b>Interfaces</b>		
DC connection	MC4	
AC connection	Spring clamp connectors	
RS 485 (Clamps / RJ45)	● / ●	
Ethernet / CAN	- / -	
Integrated web server	-	
Alarm relay	-	
<b>Appliance data</b>		
Max. efficiency	98.5 %	
European efficiency	98.2 %	
Weight	37 kg	
Dimensions (H x W x D in mm)	626 x 547 x 290	
Operating temperature	-20 ... +60 °C	
Storage temperature	-25 ... +80 °C	
Relative humidity	0 ... 95 %	
Sound pressure level	< 32 dB (A)	
Protection degree (DIN EN 60529)	IP 66	
Protection class / overvoltage category	I / Type 3	
Full graphic display <sup>(color / monochrome)</sup>	- / ●	
Storage capacity data logger	30 years	
System topology	Transformerless	
Cooling	Convection	
Standards / grid codes	VDE 0126-1-1, VDE AR-N 4105, CEI 0-21, C10/11, G83/2, EN 50438, ÖNORM E8001-4-712, UTE C15-712-1, RD 1699/661, IEC 62109, AS 4777, AS 3100	
Warranty	10 years	
<b>Type designation</b>	<b>8000 R3-S2B</b>	<b>9000 R3-S2B</b>

Subject to alterations. Valid as of 01/2014. More than 45 countries are currently supported. The current list is available from the download area of our homepage [www.platinum-nes.com](http://www.platinum-nes.com)

# Pulls out a cool 98.6%. The PLATINUM® R3-M inverter.

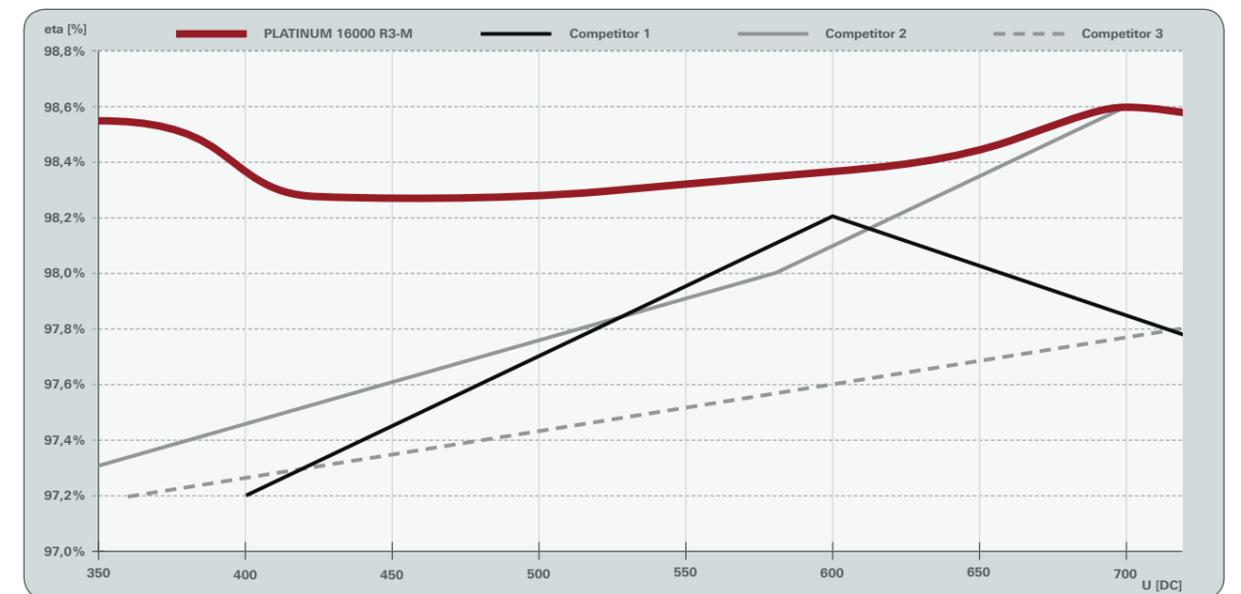


The PLATINUM® R3-M is compliant with the "Energy management (§6 EEG)" market requirement specification, the "Technical guidelines for power generating plants connected to the medium voltage grid" and the "Low voltage directive AR-N 4105".

The transformerless, three-phase high-performance R3-M inverter is the flagship of the PLATINUM® product family. It is smaller, more compact, more light-weight and more efficient. Thanks to the innovative DUAL-X® technology, it achieves a peak efficiency of 98.6 % and thus offers an excellent yield. In addition, its 10 % increase in apparent power enables the ratings of medium-voltage systems to be maximised. The pure convection cooling reduces noise levels and maintenance requirements. Furthermore, ease of installation and commissioning are assured by the low weight and automatic master programming via the PLATINUM® network IEC 485. The graphics display shows all important operating data in a clearly legible display – even during the night. The range contains five models from 7 kW to 16 kW.

- Maximum efficiency 98.6%
- Maximised ratings in medium-voltage plants thanks to 10 % increase in apparent power
- DIVE® technology for increased efficiency in the lower power output range
- RAC-MPP® technology for rapid MPP tracking
- Pure convection cooling reduces maintenance requirements and noise levels
- Integrated datalogger provides storage capacity for 30 years worth of operating data
- Suitable for universal use thanks to multi-country configuration
- Free 10-year manufacturer's warranty

## Stronger than the competition. Thanks to DUAL-X®.



High efficiency across the entire MPPT voltage range thanks to innovative DUAL-X® technology. The advantage: exceptionally high yields with optimum design flexibility.

Specifications			
R3 inverter	7000 R3-M	9000 R3-M	11000 R3-M
<b>DC Input</b>			
Max. PV power	6,700 Wp	9,000 Wp	11,200 Wp
Max. DC power	6,150 W	8,200 W	10,250 W
MPPT voltage range	350 ... 720 V		
Max. input voltage	900 V		
Max. MPPT inout current	2 x 10 A	2 x 13 A	2 x 16 A
Number of string inputs	1 + 1		
Number of MPP trackers	1		
DC disconnecter	●		
DC short circuit current	2 x 14 A	2 x 18 A	2 x 22 A
Reverse polarity protection / Ground fault monitoring (isolation check)	● / ●		
<b>AC Output</b>			
Rated power	6,000 W	8,000 W	10,000 W
Rated current	3 x 8.7 A	3 x 11.6 A	3 x 14.5 A
Max. apparent power	6,700 VA	8,900 VA	11,200 VA
Max. AC current	3 x 11.9 A	3 x 13.1 A	3 x 20 A
Power feed starts at	20 W		
Mains output voltage	3AC 230 V / 400 V (+/-20 %)		
Feed in phases / connection phases	3 / 3		
Max. permitted grid impedance <sup>[Zmax]</sup> (EN 61000-3-11)	-		
Standby consumption	1 W		
Mains frequency	50 Hz (+/-5 %)		
Power factor <sup>(cos phi)</sup> (ind ... cap)	0.7 ... 0.7		
Short circuit resistance/Ground fault monitoring (RCD)	● / ●		
<b>Interfaces</b>			
DC connection	MC4		
AC connection	Spring clamp connectors		
RS 485 (Clamps / RJ45)	● / ●		
Ethernet / CAN	- / -		
Integrated web server	-		
Alarm relay	-		
<b>Appliance data</b>			
Max. efficiency	98.5 %		98.6 %
European efficiency	98.2 %		98.3 %
Weight	36 kg		44 kg
Dimensions (H x W x D in mm)	626 x 547 x 290		
Operating temperature	-20 ... +60 °C		
Storage temperature	-25 ... +80 °C		
Relative humidity	0 ... 95 %		
Sound pressure level	< 32 dB (A)		
Protection degree (DIN EN 60529)	IP 66		
Protection class / overvoltage category	I / Type 3		
Full graphic display (color / monochrome)	- / ●		
Storage capacity data logger	30 years		
System topology	Transformerless		
Cooling	Convection		
Standards / grid codes	VDE 0126-1-1, VDE AR-N 4105, BDEW 2008, CEI 0-21, C10/11, G83/2, G59/2, EN 50438, ÖNORM E8001-4-712, UTE C15-712-1, RD 1699/661, IEC 62109, AS 4777, AS 3100		
Warranty	10 years		
<b>Type designation</b>	<b>7000 R3-MDX-10</b>	<b>9000 R3-MDX-10</b>	<b>11000 R3-MDX-10</b>

Subject to alterations. Valid as of 01/2014. More than 45 countries are currently supported. The current list is available from the download area of our homepage [www.platinum-nes.com](http://www.platinum-nes.com)

Specifications		
R3 inverter	14000 R3-M	16000 R3-M
<b>DC Input</b>		
Max. PV power	15,200 Wp	16,900 Wp
Max. DC power	13,800 W	15,350 W
MPPT voltage range	350 ... 720 V	
Max. input voltage	900 V	
Max. MPPT inout current	2 x 21 A	2 x 24 A
Number of string inputs	2 + 2	
Number of MPP trackers	1	
DC disconnecter	●	
DC short circuit current	2 x 29 A	2 x 33 A
Reverse polarity protection / Ground fault monitoring (isolation check)	● / ●	
<b>AC Output</b>		
Rated power	13,500 W	15,000 W
Rated current	3 x 19.6 A	3 x 21.7 A
Max. apparent power	15,000 VA	16,700 VA
Max. AC current	3 x 24.2 A	
Power feed starts at	20 W	
Mains output voltage	3AC 230 V / 400 V (+/-20 %)	
Feed in phases / connection phases	3 / 3	
Max. permitted grid impedance <sup>[Zmax]</sup> (EN 61000-3-11)	-	
Standby consumption	1 W	
Mains frequency	50 Hz (+/-5 %)	
Power factor <sup>(cos phi)</sup> (ind ... cap)	0.7 ... 0.7	
Short circuit resistance/Ground fault monitoring (RCD)	● / ●	
<b>Interfaces</b>		
DC connection	MC4	
AC connection	Spring clamp connectors	
RS 485 (Clamps / RJ45)	● / ●	
Ethernet / CAN	- / -	
Integrated web server	-	
Alarm relay	-	
<b>Appliance data</b>		
Max. efficiency	98.6 %	
European efficiency	98.3 %	
Weight	44 kg	
Dimensions (H x W x D in mm)	626 x 547 x 290	
Operating temperature	-20 ... +60 °C	
Storage temperature	-25 ... +80 °C	
Relative humidity	0 ... 95 %	
Sound pressure level	< 32 dB (A)	
Protection degree (DIN EN 60529)	IP 66	
Protection class / overvoltage category	I / Type 3	
Full graphic display (color / monochrome)	- / ●	
Storage capacity data logger	30 years	
System topology	Transformerless	
Cooling	Convection	
Standards / grid codes	VDE 0126-1-1, VDE AR-N 4105, BDEW 2008, CEI 0-21, C10/11, G83/2, G59/2, EN 50438, ÖNORM E8001-4-712, UTE C15-712-1, RD 1699/661, IEC 62109, AS 4777, AS 3100	
Warranty	10 years	
<b>Type designation</b>	<b>14000 R3-MDX-10</b>	<b>16000 R3-MDX-10</b>

Subject to alterations. Valid as of 01/2014. More than 45 countries are currently supported. The current list is available from the download area of our homepage [www.platinum-nes.com](http://www.platinum-nes.com)

# Brings an extra tracker into the game. The PLATINUM® R3-M2 inverter.

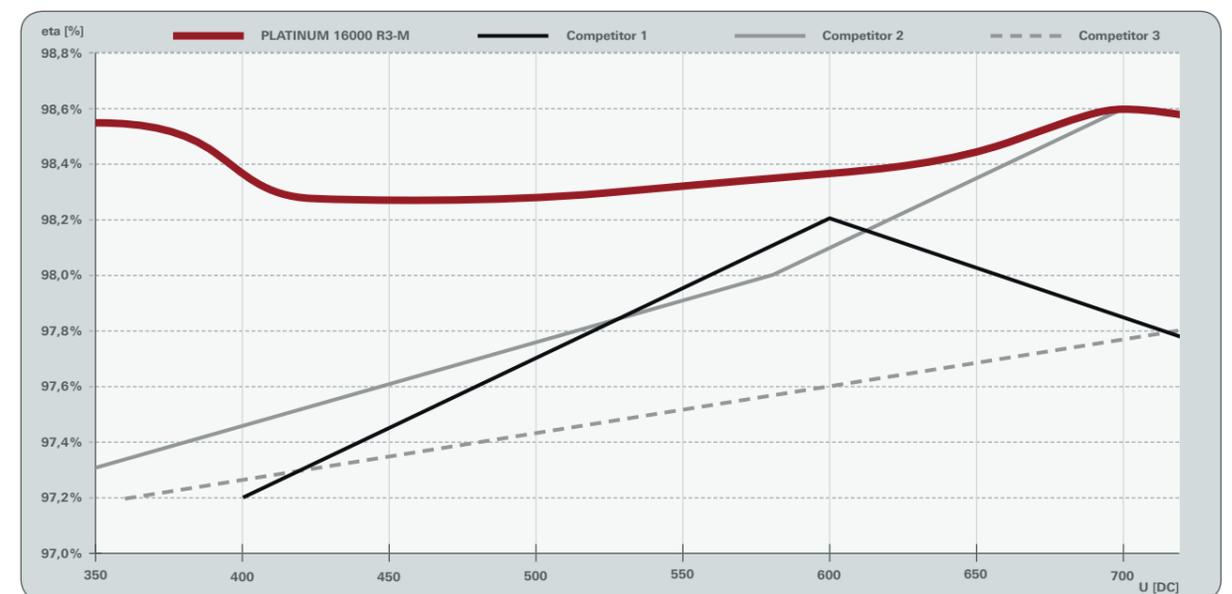


The PLATINUM® R3-M2 is compliant with the "Energy management (§6 EEG)" market requirement specification, the "Technical guidelines for power generating plants connected to the medium voltage grid" and the "Low voltage directive AR-N 4105".

With its additional MPP tracker, this transformerless, three-phase high-performance inverter R3-M2 increases the design flexibility of the PLATINUM® R3 family: ideal for partially shaded roofs, east-west facing roofs or roof/garage combinations. Thanks to the innovative DUAL-X® technology, it achieves a peak efficiency of 98.6 %. A 10 % increase of apparent power over effective power enables the ratings of medium-voltage systems to be maximised. The pure convection cooling reduces maintenance requirements and noise levels. The ease of installation and commissioning are assured by the low weight and automatic master programming via the PLATINUM® network EIA 485. The graphics display shows all important operating data in a clearly legible display – even during the night. Four models from 9 to 16 kW are available.

- Efficiency 98.6%
- 2 MPP trackers for the utmost design flexibility
- Maximised ratings in medium-voltage plants thanks to 10 % increase in apparent power
- DIVE® technology for increased efficiency in the lower power output range
- RAC-MPP® technology for rapid MPP tracking.
- Pure convection cooling reduces maintenance requirements and noise levels
- Integrated datalogger provides storage capacity for 30 years worth of operating data
- Suitable for universal use thanks to multi-country configuration
- Free 10-year manufacturer's warranty

Impresses in direct comparisons – also in terms of design flexibility.



High efficiency across the entire MPPT voltage range thanks to innovative DUAL-X® technology. The advantage: exceptionally high yields with optimum design flexibility.

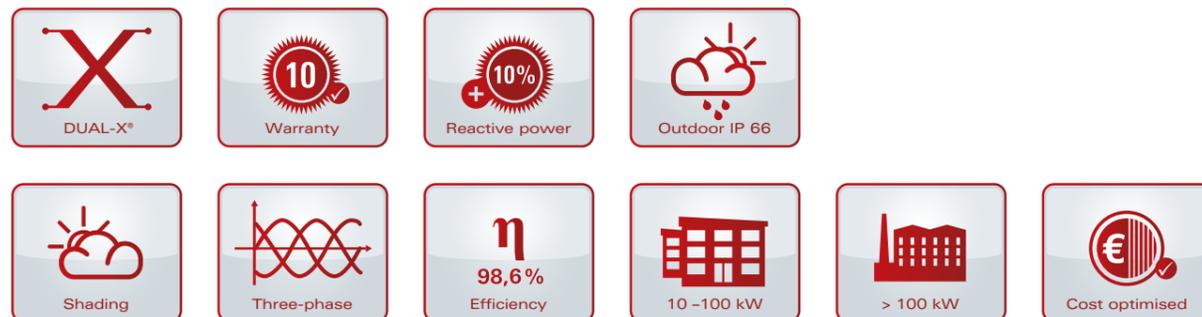
Specifications	
R3 inverter	11000 R3-M2
<b>DC Input</b>	
Max. PV power	11,200 Wp
Max. DC power	10,250 W
MPPT voltage range	350 ... 720 V / 150 ... 720 V
Max. input voltage	900 V
Max. MPPT inout current	2 x 16 A / 9.5 A
Number of string inputs	1 + 1 / 1
Number of MPP trackers	2
DC disconnect	●
DC short circuit current	2 x 22 A / 14 A
Reverse polarity protection / Ground fault monitoring (isolation check)	● / ●
<b>AC Output</b>	
Rated power	10,000 W
Rated current	3 x 14.5 A
Max. apparent power	11,200 VA
Max. AC current	3 x 20 A
Power feed starts at	20 W
Mains output voltage	3AC 230 V / 400 V (+/-20 %)
Feed in phases / connection phases	3 / 3
Max. permitted grid impedance <sup>[Zmax]</sup> (EN 61000-3-11)	-
Standby consumption	1 W
Mains frequency	50 Hz (+/-5 %)
Power factor <sup>(cos phi)</sup> (ind ... cap)	0.7 ... 0.7
Short circuit resistance/Ground fault monitoring (RCD)	● / ●
<b>Interfaces</b>	
DC connection	MC4
AC connection	Spring clamp connectors
RS 485 (Clamps / RJ45)	● / ●
Ethernet / CAN	- / -
Integrated web server	-
Alarm relay	-
<b>Appliance data</b>	
Max. efficiency	98.6 %
European efficiency	98.3 %
Weight	45 kg
Dimensions (H x W x D in mm)	626 x 547 x 290
Operating temperature	-20 ... +60 °C
Storage temperature	-25 ... +80 °C
Relative humidity	0 ... 95 %
Sound pressure level	< 32 dB (A)
Protection degree (DIN EN 60529)	IP 66
Protection class / overvoltage category	I / Type 3
Full graphic display <sup>(color / monochrome)</sup>	- / ●
Storage capacity data logger	30 years
System topology	Transformerless
Cooling	Convection
Standards / grid codes	VDE 0126-1-1, VDE AR-N 4105, BDEW 2008, CEI 0-21, C10/11, G83/2, G59/2, EN 50438, ÖNORM E8001-4-712, UTE C15-712-1, RD 1699/661, IEC 62109, AS 4777, AS 3100
Warranty	10 years
<b>Type designation</b>	<b>11000 R3-M2DXB</b>

Subject to alterations. Valid as of 01/2014. More than 45 countries are currently supported. The current list is available from the download area of our homepage [www.platinum-nes.com](http://www.platinum-nes.com)

Specifications		
R3 inverter	14000 R3-M2	16000 R3-M2
<b>DC Input</b>		
Max. PV power	15,200 Wp	16,900 Wp
Max. DC power	13,800 W	15,350 W
MPPT voltage range	350 ... 720 V / 150 ... 720 V	
Max. input voltage	900 V	
Max. MPPT inout current	2 x 21 A / 9.5 A	2 x 24 A / 9.5 A
Number of string inputs	2 + 2 / 1	
Number of MPP trackers	2	
DC disconnect	●	
DC short circuit current	2 x 29 A / 14 A	2 x 33 A / 14 A
Reverse polarity protection / Ground fault monitoring (isolation check)	● / ●	
<b>AC Output</b>		
Rated power	13,500 W	15,000 W
Rated current	3 x 19.6 A	3 x 21.7 A
Max. apparent power	15,000 VA	16,700 VA
Max. AC current	3 x 24.2 A	
Power feed starts at	20 W	
Mains output voltage	3AC 230 V / 400 V (+/-20 %)	
Feed in phases / connection phases	3 / 3	
Max. permitted grid impedance <sup>[Zmax]</sup> (EN 61000-3-11)	-	
Standby consumption	1 W	
Mains frequency	50 Hz (+/-5 %)	
Power factor <sup>(cos phi)</sup> (ind ... cap)	0.7 ... 0.7	
Short circuit resistance/Ground fault monitoring (RCD)	● / ●	
<b>Interfaces</b>		
DC connection	MC4	
AC connection	Spring clamp connectors	
RS 485 (Clamps / RJ45)	● / ●	
Ethernet / CAN	- / -	
Integrated web server	-	
Alarm relay	-	
<b>Appliance data</b>		
Max. efficiency	98.6 %	
European efficiency	98.3 %	
Weight	45 kg	
Dimensions (H x W x D in mm)	626 x 547 x 290	
Operating temperature	-20 ... +60 °C	
Storage temperature	-25 ... +80 °C	
Relative humidity	0 ... 95 %	
Sound pressure level	< 32 dB (A)	
Protection degree (DIN EN 60529)	IP 66	
Protection class / overvoltage category	I / Type 3	
Full graphic display <sup>(color / monochrome)</sup>	- / ●	
Storage capacity data logger	30 years	
System topology	Transformerless	
Cooling	Convection	
Standards / grid codes	VDE 0126-1-1, VDE AR-N 4105, BDEW 2008, CEI 0-21, C10/11, G83/2, G59/2, EN 50438, ÖNORM E8001-4-712, UTE C15-712-1, RD 1699/661, IEC 62109, AS 4777, AS 3100	
Warranty	10 years	
<b>Type designation</b>	<b>14000 R3-M2DXB</b>	<b>16000 R3-M2DXB</b>

Subject to alterations. Valid as of 01/2014. More than 45 countries are currently supported. The current list is available from the download area of our homepage [www.platinum-nes.com](http://www.platinum-nes.com)

# Charge, deliver, perform – and this at sunny, affordable prices. The PLATINUM® R3-6PACK.



All PLATINUM® R3 models fulfil the market requirements "Energy management (§6 German Renewable Energy Sources Act)", the "Technical Guideline for Local Power Plants in Medium-voltage Power Grids" and the "Low Voltage Directive AR-N-4105".

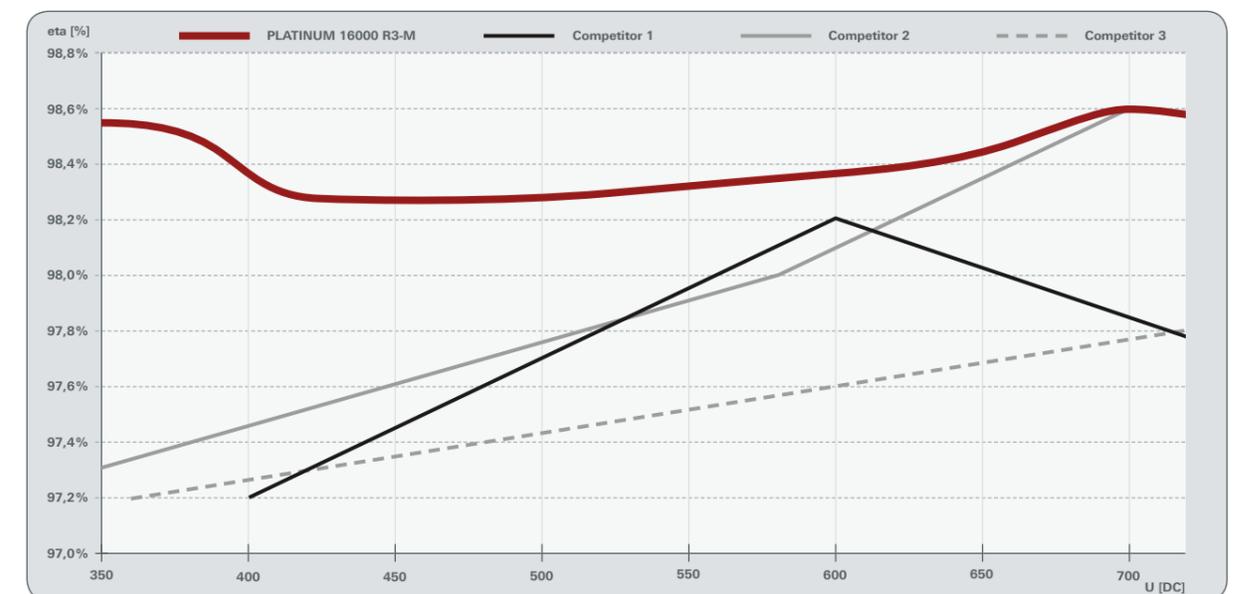
The PLATINUM® R3-6PACK is the purest energy pack for large-scale photovoltaic systems: six highly-efficient R3 inverters on one pallet, ready for delivery and quick installation. First order the mounting plates and prepare everything for installation of the PLATINUM® R3-6PACK – then simply unpack, install and connect. Done.

Advantages: thanks to cost-optimised features, large-scale systems can be realised at low prices. Delivery is coordinated with the installation. So there is no need for interim storage of the inverters. The omission of individual packaging saves time during unpacking and also minimises the packaging materials that need to be disposed of. This is handy for the user and great for the environment.

Most important of all, installation and commissioning are easy and uncomplicated. The DC connection to the inverter is tailored to the requirements of large-scale systems. The communication cables are connected via a screwed cable gland with double feedthrough in just one work step.

- No individual packaging means fewer packaging materials overall
- Carefully coordinated with the installation process – the retaining plates are delivered separately in advance
- Maximised ratings in medium-voltage plants thanks to a 10 % increase in apparent power
- Simplified connection of communication cables via a reduction in the number of work steps
- Suitable for universal use thanks to multi-country configuration

## Unrivalled performance. DUAL-X® power times six.



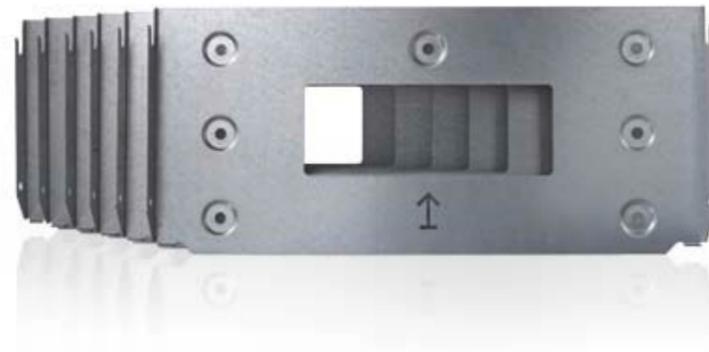
High efficiency across the entire MPPT voltage range thanks to innovative DUAL-X® technology. The advantage: exceptionally high yields with optimum design flexibility.

# Always well received. The R3-6PACK.



1.

First we deliver the mounting plates, then the R3-6PACK. Ordered and delivered in advance, you can get everything ready for immediate installation.



2.

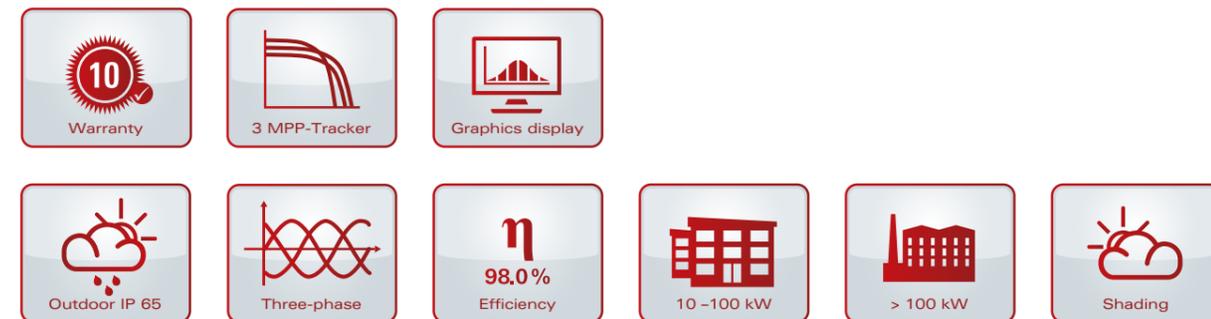
Six on one pallet: the PLATINUM® R3-6PACK offers maximum-efficiency inverters – well packaged and quickly delivered.



Specifications	
R3 inverter	16000 R3-M-6PACK
<b>DC Input</b>	
Max. PV power	16,900 Wp
Max. DC power	15,350 W
MPPT voltage range	350 ... 720 V
Max. input voltage	900 V
Max. MPPT inout current	2 x 24 A
Number of string inputs	1 + 1
Number of MPP trackers	1
DC disconnect	●
DC short circuit current	33 A
Reverse polarity protection / Ground fault monitoring (isolation check)	● / ●
<b>AC Output</b>	
Rated power	15,000 W
Rated current	3 x 21.7 A
Max. apparent power	16,700 VA
Max. AC current	3 x 24.2 A
Power feed starts at	20 W
Mains output voltage	3AC 230 V / 400 V (+/-20 %)
Feed in phases / connection phases	3 / 3
Max. permitted grid impedance [Z <sub>max</sub> ] (EN 61000-3-11)	-
Standby consumption	1 W
Mains frequency	50 Hz (+/-5 %)
Power factor (cos phi) (ind ... cap)	0.7 ... 0.7
Short circuit resistance/Ground fault monitoring (RCD)	● / ●
<b>Interfaces</b>	
DC connection	MC4
AC connection	Spring clamp connectors
RS 485 (Clamps / RJ45)	● / ●
Ethernet / CAN	- / -
Integrated web server	-
Alarm relay	-
<b>Appliance data</b>	
Max. efficiency	98.6 %
European efficiency	98.3 %
Weight	44 kg
Dimensions (H x W x D in mm)	626 x 547 x 290
Operating temperature	-20 ... +60 °C
Storage temperature	-25 ... +80 °C
Relative humidity	0 ... 95 %
Sound pressure level	< 32 dB (A)
Protection degree (DIN EN 60529)	IP 66
Protection class / overvoltage category	I / Type 3
Full graphic display (color / monochrome)	- / ●
Storage capacity data logger	30 years
System topology	Transformerless
Cooling	Convection
Standards / grid codes	VDE 0126-1-1, VDE AR-N 4105, BDEW 2008, CEI 0-21, C10/11, G83/2, G59/2, EN 50438, ÖNORM E8001-4-712, UTE C15-712-1, RD 1699/661, IEC 62109, AS 4777, AS 3100
Warranty	10 years
<b>Type designation</b>	<b>16000 R3-MDX-10-6PACK</b>

Subject to alterations. Valid as of 01/2014. More than 45 countries are currently supported. The current list is available from the download area of our homepage [www.platinum-nes.com](http://www.platinum-nes.com)

Delivering an impressive efficiency of 98 %.  
The three-phase PLATINUM® TL inverter.

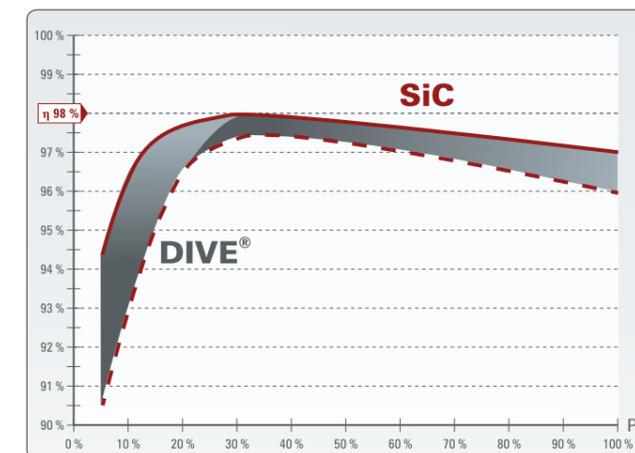


All PLATINUM® TL models are compliant with the "Energy Management (§6 EEG)" market requirement specification, the "Technical Guidelines for Power Generating Plants Connected to the Medium Voltage Grid" and the "Low-voltage Directive AR-N-4105" as of its coming into effect as the successor directive of VDE 0126-1-1.

This three-phase TL inverter impresses with a peak efficiency of 98.0 %. This is largely down to the increase in efficiency particularly in the lower output range achieved by the use of state-of-the-art SiC components in conjunction with the innovative DIVE® technology. The three-phase TL series is designed and constructed to meet the requirements of protection class IP 65 and is therefore suitable for outdoor applications. One main advantage for users is the ease with which the system can be taken into operation via the PLATINUM® network EIA 485: the inputs that are programmed at an inverter are transmitted to all networked devices. All of the key operating data can be clearly read off from the graphics display – even at night. The range includes five three-phase models ranging from 13 to 22 kW.

- Maximum efficiency 98.0 %
- 3 independent MPP trackers
- Integrated datalogger provides storage capacity for 30 years worth of operating data
- Exceptionally wide DC input voltage range
- DIVE® technology for increased efficiency in the lower power output range
- RAC-MPP® technology for rapid MPP tracking
- Suitable for universal use thanks to multi-country configuration
- Free 10-year manufacturer's warranty

Maximised efficiency thanks to SiC and DIVE® technology.



SiC (silicon carbide semiconductor technology)  
DIVE® (Dynamic Input Value Enhancement)

Intelligent power bundling for outdoor applications.  
The PLATINUM® PowerBlock.

Specially developed for extreme outdoor weather conditions, the PLATINUM® PowerBlock system is a genuine alternative to central inverters. The compact

and robust housing offers optimum protection against rain, hail, sunshine etc.



Specifications	
TL inverter	19000 TL
<b>DC Input</b>	
Max. PV power	21,300 Wp
Max. DC power	18,900 W
MPPT voltage range	3 x 350 ... 710 V
Max. input voltage	880 V
Max. MPPT inout current	3 x 18.5 A
Number of string inputs	2 / 2 / 2
Number of MPP trackers	3
DC disconnect	○
DC short circuit current	3 x 26 A
Reverse polarity protection / Ground fault monitoring (isolation check)	● / ●
<b>AC Output</b>	
Rated power	18,000 W
Rated current	3 x 26.1 A
Max. apparent power	18,000 VA
Max. AC current	3 x 26.1 A
Power feed starts at	24 W
Mains output voltage	3AC 230 V / 400 V (+/-20 %)
Feed in phases / connection phases	3 / 3
Max. permitted grid impedance <sup>[Zmax]</sup> (EN 61000-3-11)	290 mΩ
Standby consumption	3 W
Mains frequency	50 Hz (+/-5 %)
Power factor <sup>(cos phi)</sup> (ind ... cap)	0.7 ... 0.7
Short circuit resistance/Ground fault monitoring (RCD)	● / ●
<b>Interfaces</b>	
DC connection	MC4
AC connection	Spring clamp connectors
RS 485 (Clamps / RJ45)	● / ●
Ethernet / CAN	- / -
Integrated web server	-
Alarm relay	24 V <sub>AC</sub> / 2 A
<b>Appliance data</b>	
Max. efficiency	97.9 %
European efficiency	97.5 %
Weight	87 kg
Dimensions (H x W x D in mm)	743 x 972 x 262
Operating temperature	-20 ... +60 °C
Storage temperature	-25 ... +80 °C
Relative humidity	0 ... 95 %
Altitude at rated power	2,000 m / 6,560 ft
Protection degree (DIN EN 60529)	IP 65
Protection class / overvoltage category	I / Type 3
Full graphic display <sup>(color / monochrome)</sup>	- / ●
Storage capacity data logger	30 years
System topology	Transformerless
Cooling	Fan
Standards / grid codes	VDE 0126-1-1, VDE AR-N 4105, BDEW 2008, CEI 0-21, C10/11, G83/2, G59/2, EN 50438, ÖNORM E8001-4-712, UTE C15-712-1, RD 1699/661, IEC 62109, AS 4777, AS 3100
Warranty	10 years
<b>Type designation</b>	<b>19000 TLD</b>

Subject to alterations. Valid as of 01/2014. More than 45 countries are currently supported. The current list is available from the download area of our homepage [www.platinum-nes.com](http://www.platinum-nes.com)

Specifications	
TL inverter	22000 TL
<b>DC Input</b>	
Max. PV power	24,000 Wp
Max. DC power	21,600 W
MPPT voltage range	3 x 351 ... 710 V
Max. input voltage	880 V
Max. MPPT input current	3 x 21 A
Number of string inputs	2 / 2 / 2
Number of MPP trackers	3
DC disconnect	○
DC short circuit current	3 x 29 A
Reverse polarity protection / Ground fault monitoring (isolation check)	● / ●
<b>AC Output</b>	
Rated power	20,700 W
Rated current	3 x 30 A
Max. apparent power	20,700 VA
Max. AC current	3 x 30 A
Power feed starts at	24 W
Mains output voltage	3AC 230 V / 400 V (+/-20 %)
Feed in phases / connection phases	3 / 3
Max. permitted grid impedance <sup>[Zmax]</sup> (EN 61000-3-11)	253 mΩ
Standby consumption	3 W
Mains frequency	50 Hz (+/-5 %)
Power factor <sup>(cos phi)</sup> (ind ... cap)	0.7 ... 0.7
Short circuit resistance/Ground fault monitoring (RCD)	● / ●
<b>Interfaces</b>	
DC connection	MC4
AC connection	Spring clamp connectors
RS 485 (Clamps / RJ45)	● / ●
Ethernet / CAN	- / -
Integrated web server	-
Alarm relay	24 V <sub>AC</sub> / 2 A
<b>Appliance data</b>	
Max. efficiency	98.0 %
European efficiency	97.5 %
Weight	87 kg
Dimensions (H x W x D in mm)	743 x 972 x 262
Operating temperature	-20 ... +60 °C
Storage temperature	-25 ... +80 °C
Relative humidity	0 ... 95 %
Altitude at rated power	2,000 m / 6,560 ft
Protection degree (DIN EN 60529)	IP 65
Protection class / overvoltage category	I / Type 3
Full graphic display <sup>(color / monochrome)</sup>	- / ●
Storage capacity data logger	30 years
System topology	Transformerless
Cooling	Fan
Standards / grid codes	VDE 0126-1-1, VDE AR-N 4105, BDEW 2008, CEI 0-21, C10/11, G83/2, G59/2, EN 50438, ÖNORM E8001-4-712, UTE C15-712-1, RD 1699/661, IEC 62109, AS 4777, AS 3100
Warranty	10 years
<b>Type designation</b>	<b>22000 TLD</b>

Subject to alterations. Valid as of 01/2014. More than 45 countries are currently supported. The current list is available from the download area of our homepage [www.platinum-nes.com](http://www.platinum-nes.com)

Uncompromisingly high performance:  
up to 98 % efficiency.  
The single-phase PLATINUM® TL inverter.

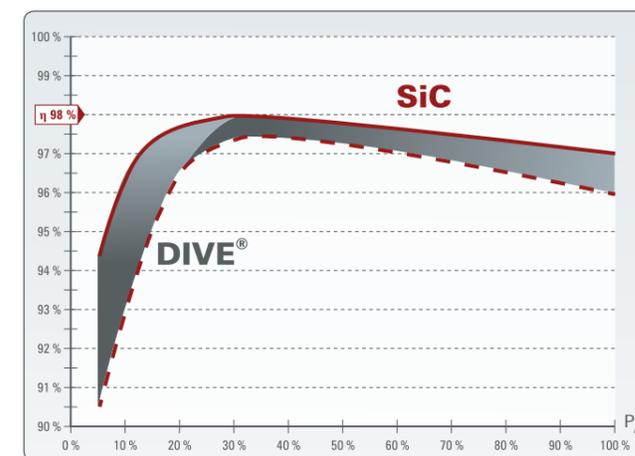


All PLATINUM® TL models are compliant with the "Energy Management (§6 EEG)" market requirement specification, the "Technical Guidelines for Power Generating Plants Connected to the Medium Voltage Grid" and the "Low-voltage Directive AR-N-4105" as of its coming into effect as the successor directive of VDE 0126-1-1.

The increased efficiency specifically in the lower power output range resulting from the combination of state-of-the-art SiC components and the innovative DIVE® technology is the key factor that contributes to the peak efficiency of 98.0 %. As it has been designed and built to meet the requirements of protection class IP 66, the single-phase TL series is exceptionally well suited to outdoor installation. One particular advantage in use is the ease with which these units can be connected up via the PLATINUM® network IEC 485. Thanks to the automatic master programming employed in this system, all of the device settings are transmitted to all connected inverters. All of the key operating data can be clearly read off from the graphics display – even at night. The TL series covers seven single-phase models ranging from 3.3 to 7 kW.

- Maximum efficiency 98.0%
- Integrated phase balancing function
- Integrated datalogger provides storage capacity for 30 years worth of operating data
- Exceptionally wide DC input voltage range
- DIVE® technology for increased efficiency in the lower power output range
- RAC-MPP® technology for rapid MPP tracking
- Suitable for universal use thanks to multi-country configuration
- Free 10-year manufacturer's warranty

Maximised efficiency thanks to SiC and DIVE® technology.



SiC (silicon carbide semiconductor technology)  
DIVE® (Dynamic Input Value Enhancement)

Specifications			
TL inverter	3801 TL	3800 TL	4300 TL
<b>DC Input</b>			
Max. PV power	4,000 Wp	4,300 Wp	4,900 Wp
Max. DC power	3,480 W	3,800 W	4,300 W
MPPT voltage range	349 ... 710 V	350 ... 710 V	351 ... 710 V
Max. input voltage	880 V		
Max. MPPT inout current	10.5 A	11.5 A	13 A
Number of string inputs	1		
Number of MPP trackers	1		
DC disconnect	○		
DC short circuit current	15 A	16 A	18 A
Reverse polarity protection / Ground fault monitoring (isolation check)	● / ●		
<b>AC Output</b>			
Rated power	3,330 W	3,680 W	4,120 W
Rated current	14.5 A	16 A	17.9 A
Max. apparent power	3,330 VA	3,680 VA	4,120 VA
Max. AC current	14.5 A	16 A	17.9 A
Power feed starts at	7 W		
Mains output voltage	230 V (+/-20 %)		
Feed in phases / connection phases	1 / 1 or 3		
Max. permitted grid impedance <sup>[Z<sub>max</sub>] (EN 61000-3-11)</sup>	–		424 mΩ
Standby consumption	1 W		
Mains frequency	50 Hz (+/-5 %)		
Power factor <sup>(cos phi) (ind ... cap)</sup>	0.7 ... 0.7		
Short circuit resistance/Ground fault monitoring (RCD)	● / ●		
<b>Interfaces</b>			
DC connection	MC4		
AC connection	Spring clamp connectors		
RS 485 (Clamps / RJ45)	● / ●		
Ethernet / CAN	– / –		
Integrated web server	–		
Alarm relay	24 V <sub>AC</sub> / 2 A		
<b>Appliance data</b>			
Max. efficiency	97.7 %		
European efficiency	97.4 %		
Weight	27 kg		
Dimensions (H x W x D in mm)	720 x 320 x 250		
Operating temperature	-20 ... +60 °C		
Storage temperature	-25 ... +80 °C		
Relative humidity	0 ... 95 %		
Altitude at rated power	2,000 m / 6,560 ft		
Protection degree (DIN EN 60529)	IP 66		
Protection class / overvoltage category	I / Type 3		
Full graphic display <sup>(color / monochrome)</sup>	– / ●		
Storage capacity data logger	30 years		
System topology	Transformerless		
Cooling	Convection		
Standards / grid codes	VDE 0126-1-1, VDE AR-N 4105, BDEW 2008, CEI 0-21, C10/11, G83/2, G59/2, EN 50438, ÖNORM E8001-4-712, UTE C15-712-1, RD 1699/661, IEC 62109, AS 4777, AS 3100		
Warranty	10 years		
<b>Type designation</b>	<b>3801 TLD</b>	<b>3800 TLD</b>	<b>4300 TLD</b>

Subject to alterations. Valid as of 01/2014. More than 45 countries are currently supported. The current list is available from the download area of our homepage [www.platinum-nes.com](http://www.platinum-nes.com)

Specifications		
TL inverter	4800 TL	5300 TL
<b>DC Input</b>		
Max. PV power	5,400 Wp	6,000 Wp
Max. DC power	4,800 W	5,300 W
MPPT voltage range	348 ... 710 V	349 ... 710 V
Max. input voltage	880 V	
Max. MPPT input current	14.5 A	16 A
Number of string inputs	1	
Number of MPP tracker	1	
DC disconnect	○	
DC short circuit current	20 A	22 A
Reverse polarity protection / Ground fault monitoring (isolation check)	● / ●	
<b>AC Output</b>		
Rated power	4,600 W	5,000 W
Rated current	20 A	21.7 A
Max. apparent power	4,600 VA	5,000 VA
Max. AC current	20 A	21.7 A
Power feed starts at	7 W	
Mains output voltage	230 V (+/-20 %)	
Feed in phases / connection phases	1 / 1 or 3	
Max. permitted grid impedance <sup>[Z<sub>max</sub>] (EN 61000-3-11)</sup>	379 mΩ	349 mΩ
Standby consumption	1 W	
Mains frequency	50 Hz (+/-5 %)	
Power factor <sup>(cos phi) (ind ... cap)</sup>	0.7 ... 0.7	
Short circuit resistance/Ground fault monitoring (RCD)	● / ●	
<b>Interfaces</b>		
DC connection	MC4	
AC connection	Spring clamp connectors	
RS 485 (Clamps / RJ45)	● / ●	
Ethernet / CAN	– / –	
Integrated web server	–	
Alarm relay	24 V <sub>AC</sub> / 2 A	
<b>Appliance data</b>		
Max. efficiency	97.7 %	
European efficiency	97.4 %	
Weight	28 kg	
Dimensions (H x W x D in mm)	720 x 320 x 250	
Operating temperature	-20 ... +60 °C	
Storage temperature	-25 ... +80 °C	
Relative humidity	0 ... 95 %	
Altitude at rated power	2,000 m / 6,560 ft	
Protection degree (DIN EN 60529)	IP 66	
Protection class / overvoltage category	I / Type 3	
Full graphic display <sup>(color / monochrome)</sup>	– / ●	
Storage capacity data logger	30 years	
System topology	Transformerless	
Cooling	Fan	
Standards / grid codes	VDE 0126-1-1, VDE AR-N 4105, BDEW 2008, CEI 0-21, C10/11, G83/2, G59/2, EN 50438, ÖNORM E8001-4-712, UTE C15-712-1, RD 1699/661, IEC 62109, AS 4777, AS 3100	
Warranty	10 years	
<b>Type designation</b>	<b>4800 TLD</b>	<b>5300 TLD</b>

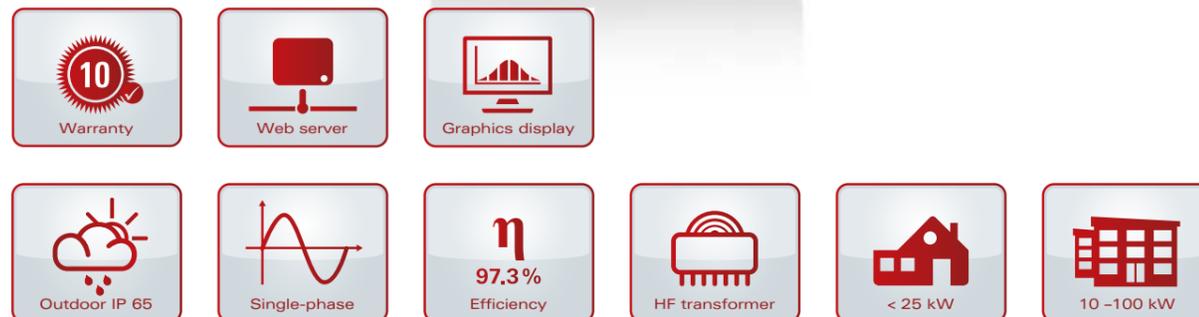
Subject to alterations. Valid as of 01/2014. More than 45 countries are currently supported. The current list is available from the download area of our homepage [www.platinum-nes.com](http://www.platinum-nes.com)

# Setting the standard for isolated string inverters.

## The PLATINUM® H inverter.

The PLATINUM® H inverter offers safety, user-friendliness and the highest degree of efficiency in the isolated inverter market. Thanks to the low weight of these units and the fact that all settings can be adjusted directly on the inverter, installation is made a lot easier and requires no additional software tools. Excellent information is provided by the graphics display and the integrated web server, which allows the unit to be monitored from a PC in real-time. The PLATINUM® H series includes four models ranging from 2.1 to 4.6 kW and is suitable for all module types.

- Efficiency up to 97.3%
- Purely convection-cooled
- Weight: 19–21 kg
- Integrated web server
- Graphics display
- Free 10-year manufacturer's warranty
- Suitable for universal use thanks to multi-country configuration



The new PLATINUM® H series satisfies the "Energy Management (§6 EEG)" market requirement specification and the "Low-voltage Directive VDE AR-N-4105".

Specifications				
H inverter	2100 H	3000 H	4000 H	4600 H
<b>DC Input</b>				
Max. PV power	2,350 Wp	3,450 Wp	4,450 Wp	5,150 Wp
Max. DC power	2,100 W	3,000 W	4,000 W	4,600 W
MPPT voltage range	230 ... 480 V			
Max. input voltage	600 V			
Max. MPPT inout current	9.5 A	13.5 A	18 A	21 A
Number of string inputs	3			
Number of MPP trackers	1			
DC disconnect	○			
DC short circuit current	14.2 A	20.2 A	27 A	31.5 A
Reverse polarity protection / Ground fault monitoring (isolation check)	● / ●			
<b>AC Output</b>				
Rated power	2,000 W	2,900 W	3,800 W	4,400 W
Rated current	9 A	13 A	17 A (16 A*)	20 A (16 A*)
Max. apparent power	2,000 VA	2,900 VA	3,800 VA	4,400 VA
Max. AC current	10.5 A	15.2 A	19.7 A	23 A
Power feed starts at	7 W			
Mains output voltage	230 V (+/-20 %)			
Feed in phases / connection phases	1 / 1			
Max. permitted grid impedance <sup>[Z<sub>max</sub> (EN 61000-3-11)]</sup>	–		446 mΩ	379 mΩ
Standby consumption	1 W			
Mains frequency	50 Hz (+/-10 %)			
Power factor (cos phi) (ind ... cap)	0.9 ... 0.9			
Short circuit resistance/Ground fault monitoring (RCD)	● / –			
<b>Interfaces</b>				
DC connection	MC4			
AC connection	Screw clamp connectors			
RS 485 (Clamps / RJ45)	● / –			
Ethernet / CAN	● / ●			
Integrated web server	●			
Alarm relay	–			
<b>Appliance data</b>				
Max. efficiency	96.9 %	97.0 %	97.2 %	97.3 %
European efficiency	96.0 %	96.2 %	96.6 %	96.9 %
Weight	19 kg		21 kg	
Dimensions (H x W x D in mm)	610 x 353 x 154			
Operating temperature	-25 ... +65 °C			
Storage temperature	-30 ... +80 °C			
Relative humidity	4 ... 99 %			
Altitude at rated power	2,000 m / 6,560 ft			
Protection degree (DIN EN 60529)	IP 65			
Protection class / overvoltage category	I / Type 3			
Full graphic display (color / monochrome)	● / –			
Storage capacity data logger	30 years			
System topology	HF transformer			
Cooling	Fan			
Standards / grid codes	VDE 0126-1-1, VDE AR-N 4105, CEI 0-21, C10/11, G83/1, EN 50438, ÖNORM E8001-4-712, UTE C15-712-1, IEC 62109			
Warranty	10 years			
<b>Type designation</b>	<b>2100 H</b>	<b>3000 H</b>	<b>4000 H</b>	<b>4600 H</b>

\*UK and Denmark: 16 A variable current limiter  
Subject to alterations. Valid as of 01/2014. More than 45 countries are currently supported. The current list is available from the download area of our homepage [www.platinum-nes.com](http://www.platinum-nes.com)

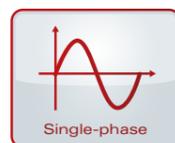
Maximum reliability.  
Even under difficult conditions.  
The PLATINUM® S inverter.



Based on the circuit principle of 'galvanic isolation', PLATINUM® S inverters offer maximum levels of safety and reliability combined with a high degree of efficiency in the class of inverters with transformers. Even under extreme or heavily fluctuating ambient conditions, these units are temperature-resistant and operate reliably and durably. Installation is made quick and easy by the DC and AC connectors. All of the key operating data can be clearly read off from the graphics display – even at night. The range contains eight models with a maximum output ranging from 2.1 to 4.6 kW. Two string inputs are provided for units with an output of 3.8 kW or higher.

**Important note:** In order to comply with legal requirements, this model is no longer approved for the German market.

- Low-frequency transformer: suitable for thin film modules
- RAC-MPP® technology for rapid MPP tracking
- Optimised data transfer and networking with other PLATINUM® inverters and monitoring devices via the PLATINUM® network EIA 485
- Wide range of input voltages
- Integrated datalogger provides storage capacity for 30 years worth of operating data
- Suitable for universal use thanks to multi-country configuration
- Free 10-year manufacturer's warranty



Specifications				
S inverter	2100 S	2800 S	3100 S	3800 S
<b>DC Input</b>				
Max. PV power	2,300 Wp	3,200 Wp	3,450 Wp	4,200 Wp
Max. DC power	2,100 W	2,800 W	3,100 W	3,800 W
MPPT voltage range	206 ... 390 V	313 ... 630 V	314 ... 630 V	315 ... 630 V
Max. input voltage	480 V	780 V		
Max. MPPT inout current	9 A		12 A	
Number of string inputs	1		2	
Number of MPP trackers	1			
DC disconnect	○			
DC short circuit current	13 A		17 A	
Reverse polarity protection / Ground fault monitoring (isolation check)	● / ●			
<b>AC Output</b>				
Rated power	1,750 W	2,400 W	2,550 W	3,300 W
Rated current	7.6 A	10.4 A	11.1 A	14.3 A
Max. apparent power	1,900 VA	2,600 VA	2,800 VA	3,600 VA
Max. AC current	8.3 A	11.3 A	12.2 A	15.7 A
Power feed starts at	13 W	14 W		18 W
Mains output voltage	230 V (+/-20 %)			
Feed in phases / connection phases	1 / 1 or 3			
Max. permitted grid impedance <sup>[Zmax]</sup> (EN 61000-3-11)	-			
Standby consumption	2.5 W			
Mains frequency	50 Hz (+/-5 %)			
Power factor <sup>(cos phi)</sup> (ind ... cap)	1			
Short circuit resistance/Ground fault monitoring (RCD)	● / -			
<b>Interfaces</b>				
DC connection	MC4			
AC connection	Wieland RST 3i / 5i			
RS 485 (Clamps / RJ45)	● / ●			
Ethernet / CAN	- / -			
Integrated web server	-			
Alarm relay	24 V <sub>AC</sub> / 2 A			
<b>Appliance data</b>				
Max. efficiency	94.7 %	95.3 %	95.6 %	
European efficiency	93.7 %	94.4 %	94.6 %	
Weight	30 kg	35 kg	42 kg	
Dimensions (H x W x D in mm)	720 x 320 x 250			
Operating temperature	-20 ... +60 °C			
Storage temperature	-25 ... +80 °C			
Relative humidity	0 ... 95 %			
Altitude at rated power	2,000 m / 6,560 ft			
Protection degree (DIN EN 60529)	IP 54			
Protection class / overvoltage category	I / Type 3			
Full graphic display (color / monochrome)	- / ●			
Storage capacity data logger	30 years			
System topology	LF transformer			
Cooling	Convection	Fan		
Standards / grid codes	VDE 0126-1-1, G83/1, G59/2, EN 50438, EN 50178, ÖNORM E8001-4-712, UTE C15-712-1			
Warranty	10 years			
<b>Type designation</b>	<b>2100 S</b>	<b>2800 S</b>	<b>3100 S</b>	<b>3800 S</b>

Subject to alterations. Valid as of 04/2013. More than 45 countries are currently supported. The current list is available from the download area of our homepage [www.platinum-nes.com](http://www.platinum-nes.com). In order to comply with legal requirements, this model is no longer approved for the German market.

Specifications				
S inverter	4300 S	4301 S	4600 S	4601 S
<b>DC Input</b>				
Max. PV power	4,800 Wp		5,100 Wp	
Max. DC power	4,300 W		4,600 W	
MPPT voltage range	320 ... 630 V	277 ... 470 V	320 ... 630 V	278 ... 470 V
Max. input voltage	780 V	580 V	780 V	580 V
Max. MPPT inout current	12.5 A	15 A	13 A	16 A
Number of string inputs	2			
Number of MPP trackers	1			
DC disconnect	○			
DC short circuit current	18 A	21 A	18 A	22 A
Reverse polarity protection / Ground fault monitoring (isolation check)	● / ●			
<b>AC Output</b>				
Rated power	3,680 W		3,800 W	
Rated current	16 A		16.5 A	
Max. apparent power	4,050 VA		4,200 VA	
Max. AC current	17.6 A		18.3 A	
Power feed starts at	18 W	17 W	18 W	17 W
Mains output voltage	230 V (+/-20 %)			
Feed in phases / connection phases	1 / 1 or 3			
Max. permitted grid impedance <sup>[Zmax]</sup> (EN 61000-3-11)	-		460 mΩ	
Standby consumption	2.5 W			
Mains frequency	50 Hz (+/-5 %)			
Power factor <sup>(cos phi)</sup> (ind ... cap)	1			
Short circuit resistance/Ground fault monitoring (RCD)	● / ●			
<b>Interfaces</b>				
DC connection	MC4			
AC connection	Wieland RST 3i / 5i			
RS 485 (Clamps / RJ45)	● / ●			
Ethernet / CAN	- / -			
Integrated web server	-			
Alarm relay	24 V <sub>AC</sub> / 2 A			
<b>Appliance data</b>				
Max. efficiency	95.6 %	94.6 %	95.6 %	94.6 %
European efficiency	94.7 %	93.9 %	94.8 %	93.8 %
Weight	42 kg	43 kg	42 kg	43 kg
Dimensions (H x W x D in mm)	720 x 320 x 250			
Operating temperature	-20 ... +60 °C			
Storage temperature	-25 ... +80 °C			
Relative humidity	0 ... 95 %			
Altitude at rated power	2,000 m / 6,560 ft			
Protection degree (DIN EN 60529)	IP 54			
Protection class / overvoltage category	I / Type 3			
Full graphic display (color / monochrome)	- / ●			
Storage capacity data logger	30 years			
System topology	LF transformer			
Cooling	Fan			
Standards / grid codes	VDE 0126-1-1, G83/1, G59/2, EN 50438, EN 50178, ÖNORM E8001-4-712, UTE C15-712-1			
Warranty	10 years			
<b>Type designation</b>	<b>4300 S</b>	<b>4301 S</b>	<b>4600 S</b>	<b>4601 S</b>

Subject to alterations. Valid as of 04/2013. More than 45 countries are currently supported. The current list is available from the download area of our homepage [www.platinum-nes.com](http://www.platinum-nes.com). In order to comply with legal requirements, this model is no longer approved for the German market.

Designed for your success.  
The free design software  
PLATINUM® SolarConfig Plus.

PLATINUM® SolarConfig Plus makes a lot of things easier. On the basis of a postcode database, this software calculates reliable irradiation and temperature data for around 50,000 locations worldwide. In addition to this, it enables users to make a reliable choice of inverter according to grid code and country approval.

The exceptionally user-friendly software offers a selection of design suggestions and performs reliable yield and profitability calculations on the basis of the data collected. It is suitable for all PLATINUM® inverters – in particular for the efficiency-optimised inverters in the R3 series with DUAL-X® topology.

On top of this, SolarConfig Plus also offers a wealth of features. For example via the intuitive access to an extensive module library containing around 40,000 modules. Regular updates ensure that all of the site, inverter and module databases are constantly up-to-date.

With SolarConfig Plus, PLATINUM® offers installation engineers, architects, professional planners and engineers an extremely attractive design tool that is both free and requires no licence.

It is also extremely beneficial for facility, industry and energy supply companies, as well as for public utility companies, vocational training colleges or other institutions of education.



# Delivering the best yield across Europe. The PLATINUM® range of inverters.

## References.

PLATINUM® inverters are in use across the whole of Europe, from the UK to Greece. Customers particularly value the outstanding performance, exceptional quality and ease of installation and commissioning of the multi-country devices. This list of international referen-

ces once again highlights the significance of inverter technology in terms of the efficiency of photovoltaic systems and therefore for the long-term success of solar energy.

### **Neuhardenberg, Brandenburg, Germany.**

Nearly 1,000 PLATINUM® inverters in Germany's largest solar park.

On the site of a former military airbase, Germany's largest solar park (featuring 600,000 modules) has been built in the space of just five weeks over an area of 24 ha.

One part-section with around 91,000 modules is equipped with nearly a thousand PLATINUM® inverters. The park has been feeding electricity into the grid since March 2013. Now the plant supplies clean electricity to over 48,000 households.

### **Equipment:**

■ 996 22000 TL inverters



# Impressive performance both in the east and west. The PLATINUM® range of inverters. References.

## Gauting, Bayern, Germany.

Former gravel quarry converted into a solar park.

The new solar park in Gauting is a textbook example of how converted areas of land can be transformed into energy generation sites. On the site of a filled-in gravel quarry – i.e. a site with only very limited potential for re-use – a solar plant was constructed as a compensation measure. With a feed-in output of 1.5 MW, this

can supply clean electricity to around 600 average homes. In addition, it also saves around 1,065 tons of CO<sub>2</sub> emissions per year in comparison to conventional energy production.

### Equipment:

- 6,336 modules (230 W)
- 66 22000 TL inverters



## Medvode, Gorenjska, Slovenia.

Seven on one roof.

The solar system installed on the roof of a production hall has been generating electricity since April 2012. With around 175,000 kWh per year, this is the largest solar power plant to date in the local community. PLATINUM® supplied seven inverters of type 22000 TL for this.

### Equipment:

- 672 modules (245 W)
- 7 22000 TL inverters



## Moscow, Central Russia, Russia.

Two PLATINUM® 3100 S inverters for the Russian Ministry of Industry and Trade.

Two solar systems are installed on the roof of the Russian Ministry of Industry and Trade in the centre of Moscow – each delivering an output of 3 kWp. The choice of the two corresponding inverters was made in favour of the PLATINUM® 3100 S. Since August 2011 the system has been supplying the ministry with clean electricity.

### Equipment:

- 2 3100 S inverter



## Grossenegg/Diex, Kärnten, Austria.

Operational since summer 2012.

In this privately owned photovoltaic system, the sun shining over the mountains of Kärnten easily generates 4.32 kWp with the aid of a PLATINUM® TL inverter.

### Equipment:

- 3 solar trackers, 4.32 kWp
- 1 4300 TL inverter



## Coltau/Baia Mare, Maramures County, Romania.

Operational since spring 2013 with an output of 1 MWp.

### Equipment:

- 4,200 modules
- 43 22000 TL inverters
- 2 9000 R3-M inverters



Keep an eye on energy.  
The PLATINUM® monitoring system.

How much electricity is being produced by the solar modules? What is the efficiency of the inverters? And how high is the yield? On smaller systems? On large-scale plants?

The PLATINUM® monitoring system offers a range of professional solutions for every size of plant. It enables around-the-clock monitoring of a photovoltaic plant and provides detailed data and measurements for functions, power output and efficiency.

For example, the current power output, daily/monthly/annual yield and configuration data can be called up, monitored and visualised at any time. And you can enjoy mobile access from a tablet or PC or even highly professional access over the Internet.

# Analysing performance and profitability. The PLATINUM® WebMaster Pro.



Specifications	
<b>Dimensions</b> (H x W x D in mm)	170 x 180 x 35
<b>Housing</b>	Plastic housing for indoor and cabinet usage
<b>Mounting</b>	Pedestal, wall mount, DIN rack
<b>Protection degree</b>	IP 20
<b>Operating temperature</b>	-20 ... +75 °C
Interfaces	
<b>RS 485 (Clamps / RJ45)</b>	● / ●
<b>Ethernet</b>	10/100 MBit/s, RJ45 connector
Electrical data	
<b>Operating voltage</b>	230 V

Subject to alterations. Valid as of 04/2013.

In commercial photovoltaic systems, analysis of the technical performance and power output is an important part of plant monitoring, as this provides vital information about profitability and commercial success. After all, the key here is to recover the high investment and operating costs. Thanks to the scalability of PLATINUM® WebMaster Pro, it can be used to monitor plants with up to 1,000 PLATINUM® inverters.

- PLATINUM® network EIA 485
- Supports plants with up to 1,000 inverters
- Automatic messaging to PC or mobile phone in the event of a fault
- Access via web browser; no additional PC software required
- Connection of sensors via the PLATINUM® IOBox
- Connection to the ripple control receiver(s) of the grid operator via the IOBox



# Expanding PLATINUM® WebMaster Pro. The PLATINUM® IOBox.

In order to comply with legal requirements and technical directives, plant operators are required to provide feed-in management solutions. With its large number of inputs, the PLATINUM® IOBox offers numerous options for connection to the telecontrol engineering systems of the grid operator. In addition, these inputs are also suitable for connecting various sensors. With the aid of the integrated network interface, PLATINUM® IOBox can be easily connected to the local grid at the plant.

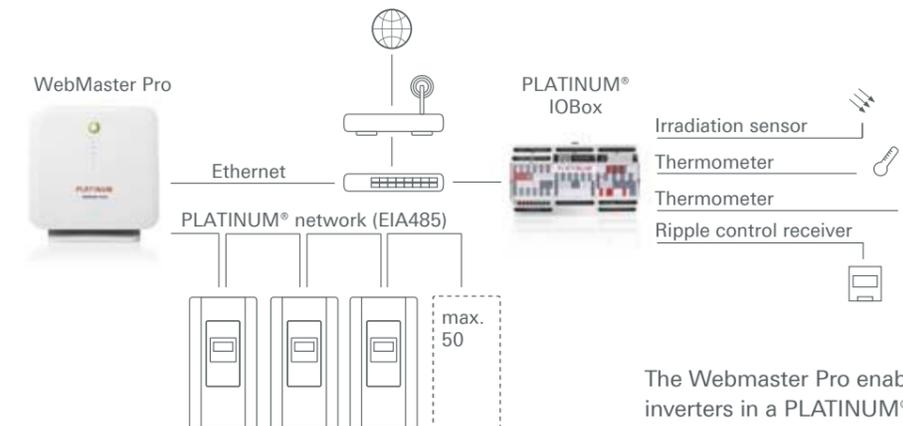
- 10 digital inputs
- 6 analogue inputs, switchable measuring range
- 10 potential-free relay outputs
- Ethernet interface
- S0 input for the connection of feed-in meters



Specifications	
<b>Dimensions</b> (H x W x D in mm)	60 x 86 x 157
<b>Housing</b>	Plastic housing for indoor and cabinet usage
<b>Protection degree</b>	IP 20
<b>Operating temperature</b>	0 ... +50 °C
Interfaces	
<b>RS 485 (Clamps / RJ45)</b>	● / ●
<b>Digital inputs</b>	10 digital inputs (5 mA at 24 V, Low: 0–4 V, High 15–30 V), S0 meter connection, screw clamp connection
<b>Analogue inputs</b>	6 analogue inputs, measurement range switchable: 0–10 V (11 kΩ), 0–600 mV (1 MΩ), 0–150 mV (1 MΩ), 0–20 mA (390 Ω), screw clamp connection
<b>Digital outputs</b>	10 potential-free relay contacts, max. 2 A, max. 30 VDC, screw clamp connection
<b>Ethernet</b>	10/100 MBit/s, RJ45 connector
Electrical data	
<b>Power supply</b>	24 VDC
<b>Power consumption</b>	approx. 160 mA at 24 VDC

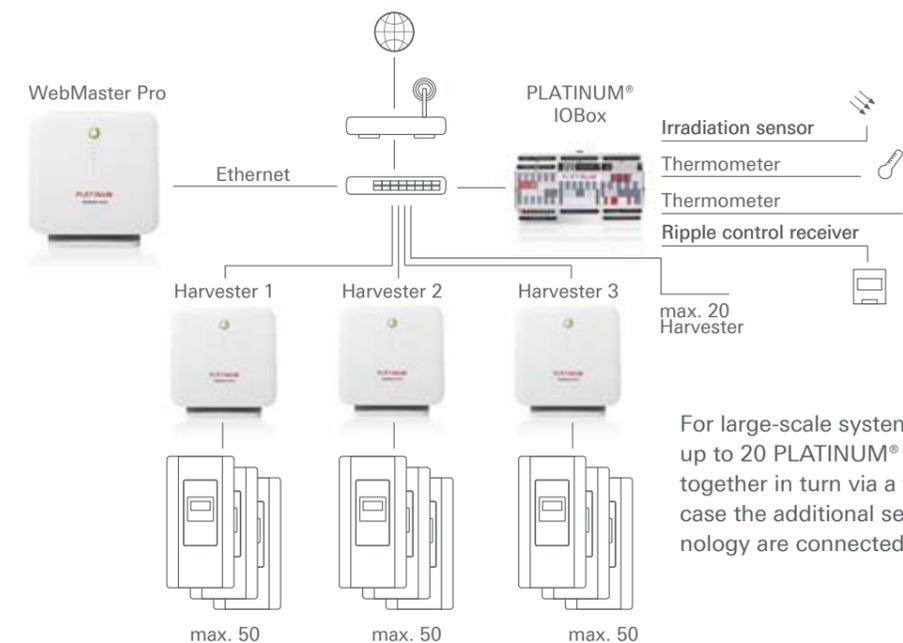
Subject to alterations. Valid as of 04/2013.

## Plant configuration with up to 50 inverters.



The Webmaster Pro enables monitoring of up to 50 inverters in a PLATINUM® network. With the aid of an IOBox, additional sensors and a ripple control receiver for feed-in management can be connected.

## Plant configuration with up to 1,000 inverters.



For large-scale systems with more than 50 inverters, up to 20 PLATINUM® networks can be brought together in turn via a further WebMaster Pro. In this case the additional sensors and telecontrol technology are connected using up to five IOBoxes.

# Internet-based monitoring of large-scale systems. The PLATINUM® SolarPortal.

In the case of large-scale systems, it is particularly important to safeguard the yield generated by the system. User-friendly monitoring and yield analysis systems are a key prerequisite for this.

PLATINUM® SolarPortal enables professional remote monitoring via the Internet. Via PLATINUM® WebMaster Pro, all of the relevant plant data is transmitted to the SolarPortal server, where the data is then stored and processed. This then highlights any faults and long-term yield fluctuations.

- Global access
- Integrated user administration enables customer-specific alarm management
- Early fault detection optimises profitability
- Performance monitoring via calculation of target values and actual values from weather data
- For individual plants, virtual plants and plant parks
- Displays the power output for different time periods, as well as temperature, voltages, currents etc.
- E-mail dispatch
- Data backup, user administration, individual e-mail configuration, data download to PC
- Technical and commercial reports, generation of individual reports
- Also available as a smartphone app



## Bringing energy to life. PLATINUM® Energy management.

The PLATINUM® energy management concept offers a wide range of potential applications. This starts with roof top solar systems and direct use of clean electricity. Via the PLATINUM® Webmaster Home and the PLATINUM® Battery, this opens up the full range of comforts of SmartHome.

With PLATINUM® Webmaster Home, it is really easy to control heat pumps, recharge an electric car, or control electrical storage heaters and many other components. User-friendly access is available via PC, tablet or via a smartphone for mobile access.

Compatibility of all of the components is ensured via the "Smart Eco Ready" seal.



Analyses energy values,  
optimises consumption.  
The PLATINUM® WebMaster Home.



PLATINUM® WebMaster Home represents the first step into the world of Smart ECO System. It measures all of the key data for the photovoltaic system, provides information about output and generates alarms in the event of a fault. Thanks to the integrated wireless standards

EnOcean® and Z-Wave®, PLATINUM® WebMaster Home supports an almost unlimited number of components. Functional upgrades can be implemented at any time.

- Monitoring of up to 5 PLATINUM® inverters via the PLATINUM® network EIA 485
- Detailed measurement of output and consumption
- Intelligent closed-loop control for the 70 % limit according to EEG 2012
- Integrated interface to the PLATINUM® Battery
- Monitoring and closed-loop control for up to 5 storage systems
- Representation and controlling of room scenarios
- Recording and representation of individual consumption profiles for connected devices
- Suitable for upgrading with standard commercially available EnOcean® and Z-Wave® components (up to 400 units)
- Smart Grid interfaces as standard
- Optional remote reading of current meters

Specifications	
Dimensions (H x W x D in mm)	170 x 180 x 35 mm
Housing	Plastic housing for indoor and cabinet usage
Mounting	Pedestal, wall mount, DIN rack
Protection degree	IP 20
Operating temperature	0 ... +50 °C
Interfaces	
RS 485 (Clamps / RJ45)	● / ●
Ethernet	10/100 MBit/s, RJ45 connector
Wireless interfaces	Z-Wave® and EnOcean®
PowerLine communication	PLC Narrow Band
Electrical data	
Operating voltage	230 V

Subject to alterations. Valid as of 04/2013.

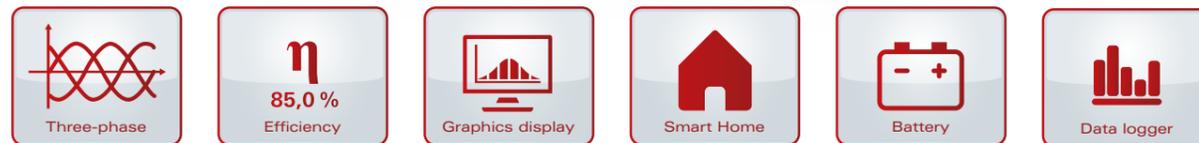
# Intelligent control for solar energy. PLATINUM® WebMaster Home.



Webmaster Home enables intelligent control of the electricity generated from environmentally friendly photovoltaic production. It supplies domestic appliances, controls heat pumps and increases living comfort by integrating dimmers for the lights or heating controls.

Surplus energy is either stored in the battery or can be used to recharge an electric car. The controls are extremely easy and safe to use via the Smart Eco Cloud, or via PC or tablet visualisation.

# Delivers solar energy around the clock. The PLATINUM® Battery.



The PLATINUM® Battery stores solar energy reliably and makes it available around-the-clock. PLATINUM® thus helps to achieve greater self-sufficiency in private power supplies and relieves the burden on the national grid. The new around-the-clock availability of self-generated electricity along with the increase in own consumption make the PLATINUM® Battery a technology for the future and for the energy turnaround.

Thanks to the innovative lithium battery technology, the easy operation of the 7" touch display, the interactive feature for optimising own consumption

and the standby current function, the PLATINUM® Battery offers maximum user-friendliness and quality in utilising and organising your self-generated, environmentally friendly electricity.

The PLATINUM® Battery is compatible with all PLATINUM® photovoltaic systems; existing systems can be retrofitted. The range encompasses the sizes Basic to XXL, with a battery capacity of 4.6 kWh to 41 kWh.

- Self-sufficient power supply
- Innovative lithium battery with a service life of 20 years (5,000 cycles)
- Compatible with existing PLATINUM® PV systems
- Emergency power feature
- 5-year performance guarantee (optional 7-year fair value replacement guarantee)

Specifications						
	Basic	S	M	L	XL	XXL
<b>Battery</b>						
<b>Battery Type</b>	Lithium iron phosphate (LiFePo)					
<b>Usable capacity (70 %)</b>	3,2 kWh	5,7 kWh	7,1 kWh	14,3 kWh	14,3 kWh	28,7 kWh
<b>Storage capacity</b>	4,6 kWh	8,1 kWh	10,2 kWh	20,5 kWh	20,5 kWh	41,0 kWh
<b>Power output</b>						
<b>Continuous power in battery operation (25 °C)</b>	1.800 W	2.800 W	4.100 W	4.600 W	3 x 3.200 W	3 x 4.600 W
<b>Peak power in battery operation (1,5 s)</b>	2.000 W	3.000 W	4.500 W	5.000 W	3 x 3.500 W	3 x 5.000 W
<b>Maximum permitted connected power</b>	2.400 W	3.500 W	5.000 W	6.000 W	3 x 4.000 W	3 x 6.000 W
<b>Maximum charging power</b>	1,275 W	1.800 W	2.550 W	4.635 W	6.180 W	7.725 W
<b>Charging time (95 %)</b>	2,50 h	3,15 h	2,80 h	3,10 h	2,30 h	3,70 h
<b>System power</b>						
<b>Connection</b>	AC-coupled system (complete isolation from the mains grid in battery operation)					
<b>Switching time L1 / L2, L3</b>	0–15 ms / 2–35 ms (parallel phase connection of L1 to L2 and L3)			0–15 ms / 0–15 ms		
<b>Standalone capability</b>	● (depending on the inverter)					
<b>Grid connection</b>	400 V AC					
<b>Generator connection</b>	230 V AC; 5,3 kW			400 V AC; 3 x 5,3 kW		
<b>Three-phase supply</b>	● (parallel phase connection from L1 to L2 and L3)			●		
<b>Three-phase AC current capability</b>	–			●		
<b>Efficiency</b>	85 %					
<b>Number of cycles</b>	5.000					
<b>Performance guarantee<sup>2</sup></b>	5 years (optional 7-year fair value replacement guarantee)					
<b>Mechanical systems / environment</b>						
<b>Operating temperature</b>	+5 ... +25 °C					
<b>Storage temperature</b>	-10 ... +40 °C					
<b>Protection degree (DIN EN 60529)</b>	IP 21					
<b>Protection class</b>	1					
<b>Relative humidity</b>	2 ... 90 % non-condensing					
<b>Standards / grid codes</b>	EN62133:2003; EMV; UN38.3; VDE ARN 4105 (optional)					
<b>Display / operation</b>	7-inch / analogue resistive film touch screen					
<b>Weight</b>	150 kg	180 kg	230 kg	310 kg	520 kg	900 kg
<b>Dimensions (W x H x D in cm)</b>	60 x 130 x 40		60 x 130 x 40 + 60 x 90 x 40		60 x 130 x 40 + 60 x 170 x 40	(3 x) 60 x 170 x 40
<b>Option VDE ARN 4105 dimensions (W x H x D in mm)</b>	64 x 130 x 50		(2 x) 64 x 130 x 50		(2 x) 64 x 130 x 50	(3 x) 64 x 170 x 50
<b>Transport</b>	Transport category 2; hazardous substances class 9 as per UN 3481					
<b>Interfaces</b>						
<b>LAN</b>	10/100 Mbit Ethernet					
<b>Remote control</b>	PC, smartphone					
<b>Monitoring</b>	PC, smartphone					
<b>Type designation</b>	<b>Battery Basic</b>	<b>Battery S</b>	<b>Battery M</b>	<b>Battery L</b>	<b>Battery XL</b>	<b>Battery XXL</b>

Subject to technical alterations. The values, performance figures and other technical data stated in this data sheet and any illustrations or drawings contained in it are only approximately indications unless we have expressly stated that the data are binding.  
<sup>1</sup>Rough guide value. Does not replace the design calculations and the associated analysis of the exact load profile.  
<sup>2</sup>Refer to the terms and conditions of the PLATINUM® Battery warranty.

As at 04/2013.

Helping you to take the next step.  
Not just with energy affairs.  
The PLATINUM® PartnerCenter.



At the Wangen site we have opened our new training centre for partners, customers and employees. The PLATINUM® PartnerCenter offers a wide range of training courses, seminars and workshops for operators of photovoltaic plants, planners and installation engineers, but also for service technicians and buyers.

The – as a rule – events are divided into basic training, product training and intensive courses. In addition to the scheduled programme, it is also possible to agree dates on an individual basis. Above a certain group size it is also possible to run the training courses directly on-site at our partner or customer companies.

The PLATINUM® PartnerCenter sees itself as a meeting place for the sharing of competence and experiences. Competent instructors offer a comprehensive and easy to understand introduction into the theory and practice of the relevant subject area. The user-focussed training concept is tailored to the requirements, needs and issues of the course participants.



# For existing experts and everyone who wants to become an expert. The PLATINUM® range of training courses.

What do decision-makers in electronics and photovoltaics companies need to know about standards, laws and directives? What do planners, installation engineers or plant managers need to look out for when monitoring photovoltaic systems? When is it a good idea to use a single-phase string inverter – and when would a three-phase one be better?

Questions like these and many more are answered in the training courses offered by the PLATINUM® PartnerCenter. Experienced instructors offer competent and clear information to help make the most out of every photon. In the process, not only do they cover technological aspects, but they also look at sales and service issues.

## Basic training courses:

PLATINUM® string inverters, single-phase  
For installation engineers and service technicians, planners, specialist retailers  
Duration: approx. 6 hours

PLATINUM® string inverters, three-phase  
For installation engineers and service technicians, planners, sales/marketing staff  
Duration: approx. 6 hours

PLATINUM® Battery  
Decision-makers in electrical engineering/PV companies, PV plant planners, specialist retailers  
Duration: approx. 5 hours

PLATINUM® Monitoring  
For installation engineers and service technicians, planners and plant managers of PV plants  
Duration: 2 days

## Product training courses:

Sales – PLATINUM® photovoltaic products  
For decision-makers in electrical engineering and PV companies, purchasers and salesmen  
Duration: approx. 6 hours

Sales – PLATINUM® Battery  
For decision-makers in electrical engineering and PV companies, purchasers and salesmen  
Duration: approx. 4 hours

## Intensive training courses:

Service – PLATINUM® string inverters  
For PLATINUM® service partners, installation engineers, service technicians  
Duration: 1 day

## Customer-specific training courses:

By arrangement, also available on-site for groups of 10 or more  
Duration: 1 day

A detailed listing of events with information about prior knowledge, content and training methods can be found here: [www.platinum-nes.com](http://www.platinum-nes.com)



# Delivers excellent values for environmental management as well. Production, packaging and return of PLATINUM® products.

For any company that develops technology promoting the sustainable use of resources, responsible practices are an essential part of the corporate culture. We carry the corresponding certifications and ensure compliance of the PLATINUM® brand with all relevant environmental directives.

PLATINUM® inverters are manufactured by Diehl Controls to the usual quality standards. The production has an environmental management system and is certified according to ISO 14001.

## PLATINUM® is compliant with all important environmental directives:

### RoHS directive:

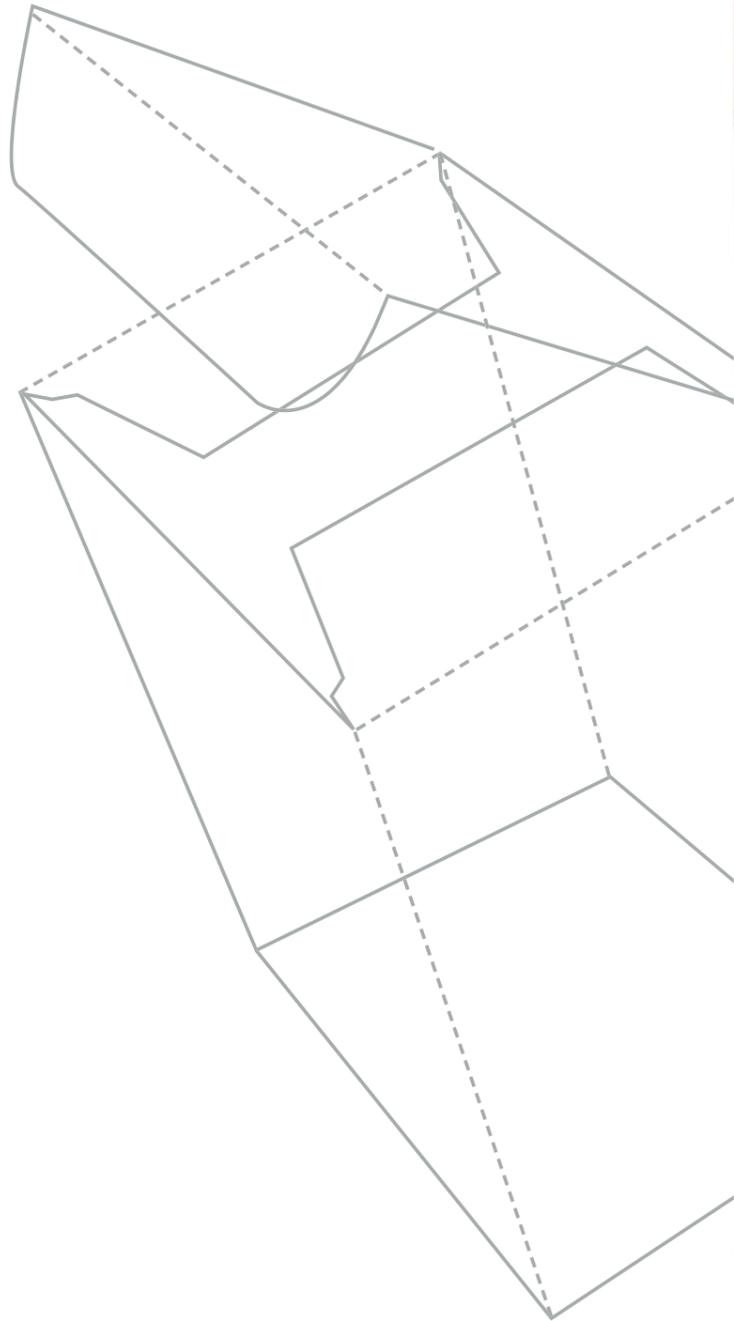
Our products comply with the RoHS directive. This means that they do not contain hazardous substances such as lead or mercury.

### Regulation on packaging:

To ensure that the packaging we use for our products can also be disposed of in an environmentally friendly manner and recycled, we take part in the dual waste disposal system and comply with the requirements of the regulation on packaging.

### Return of end-of-life electrical and electronic equipment:

To ensure that returned products are disposed of in an environmentally friendly manner, we are registered in accordance with the Waste Electrical and Electronic Equipment Directive (WEEE).





## Imprint

### **PLATINUM GmbH**

Pfannerstraße 75  
88239 Wangen im Allgäu, Germany  
Tel. +49 7522 9738-0  
Fax: +49 7522 9738-100

Managing Director: Dipl. Kfm. / MBA Igor Ferlan

Registered office of the company: Wangen i. A.  
Registration court: Ulm district court HRB 728985

**PLATINUM GmbH**

Pfannerstraße 75

88239 Wangen im Allgäu, Germany

Phone: +49 7522 9738-0

Fax: +49 7522 9738-100

[www.platinum-nes.com](http://www.platinum-nes.com)