

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



<p>Dual-X®</p>	<p>Warranty</p>	<p>Reactive power</p>	<p>Outdoor IP 66</p>		
<p>Shading</p>	<p>Three-phase</p>	<p>Efficiency</p>	<p>&lt; 25 kW</p>	<p>10 – 100 kW</p>	<p>&gt; 100 kW</p>

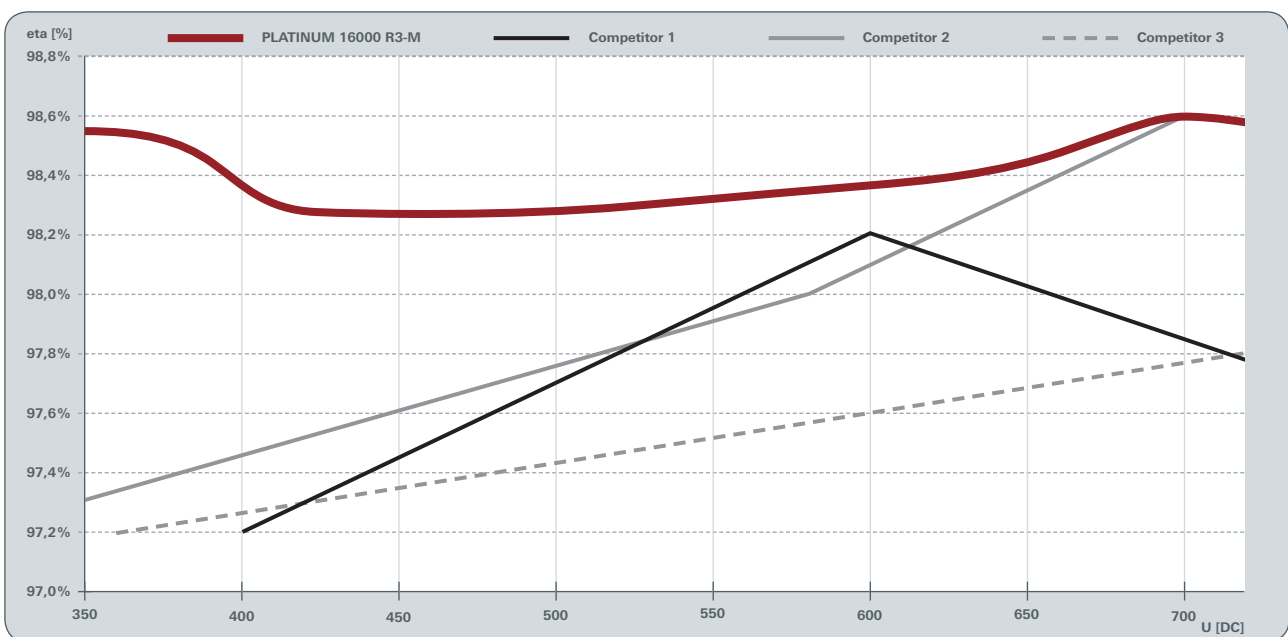
All PLATINUM® R3 models are compliant with the “Energy Management (§6 EEG)” market requirement specification, the “Technical Guidelines for Power Generating Plants Connected to the Medium Voltage Grid” and the “Low-voltage Directive AR-N-4105” as of its coming into effect as the successor directive of VDE 0126-1-1.

**PLATINUM®**  
Next Energy Solution.

The transformerless, three-phase high-performance R3-M inverter is the flagship of the PLATINUM® product family. It is smaller, more compact, more lightweight 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 EIA 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 (@ cos phi = 1)	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		2 + 2
Number of MPP trackers	1		
DC disconnect	•		
DC short circuit current	14 A	18 A	22 A
Reverse polarity protection / Ground fault monitoring (isolation check)	• / •		
<b>AC Output</b>			
Rated power (@ cos phi = 1)	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 <small>[Z<sub>max</sub>] (EN 61000-3-11)</small>	-		
Standby consumption	1 W		
Mains frequency	50 Hz (+/-5 %)		
Power factor (cos phi) (ind ... kap)	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 %		
Altitude at rated power	2,000 m / 6,560 ft		
Protection degree (except digital interface)	IP 66		
Protection class / overvoltage category	I / Typ 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 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)

● Standard ○ Optional - Not available

Specifications		
R3 inverter	14000 R3-M	16000 R3-M
<b>DC Input</b>		
Max. PV power	15,200 W <sub>p</sub>	16,900 W <sub>p</sub>
Max. DC power (@ cos phi = 1)	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 disconnect	•	
DC short circuit current	29 A	33 A
Reverse polarity protection / Ground fault monitoring (isolation check)	• / •	
<b>AC-Ausgang</b>		
Rated power (@ cos phi = 1)	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 [ $Z_{max}$ ] (EN 61000-3-11)	-	
Standby consumption	1 W	
Mains frequency	50 Hz (+/-5 %)	
Power factor (cos phi) (ind ... kap)	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 %	
Altitude at rated power	2,000 m / 6,560 ft	
Protection degree (except digital interface)	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 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)

● Standard   ○ Optional   - Not available

# 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.



Your sales partner:



PLATINUM GmbH  
Pfannerstraße 75  
88239 Wangen im Allgäu, Germany  
Tel: +49 7522 9738-0  
Fax: +49 7522 9738-100  
platinum@diehl-controls.com  
www.platinum-nes.com