

DIEHL

AKO

# PLATINUM

CENTRAL INVERTER C

500 CTL  
100 CTL  
100 CS

100 kW and 500 kW central inverters with and without transformer



# PLATINUM

CENTRAL INVERTER C



## PLATINUM 100 CS, 100 CTL and 500 CTL

Three-phase central inverters – cost-efficient large-scale plants

Based on supremely reliable Ingeteam central inverters, the PLATINUM C inverter series has been developed in order to combine an established technology with the inverter's all-embracing integration in a monitoring concept of the PLATINUM network.

The C inverters' thermal stability are extraordinary, a maximum range up to +65 °C speaks for itself.

Transformerless models reach an efficiency of up to 98.5% (model 500 CTL). The 500 CTL models are equipped with three MPP trackers.

A triple master-slave technology optimizes the yield in case of low solar radiation.

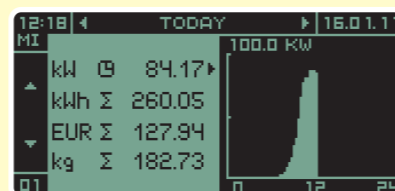
All inverters comply with the current market requirement standards Energy Management (§6 EEG) and the German grid code Medium voltage directive.

**500 CTL**  
**100 CTL**  
**100 CS**

maximum temperature range:  
**up to +65 °C**



**η 98.5 %**  
efficiency  
for your large-scale plant



The clearly arranged full graphic display allows quick checking of the appliance's power.

■ The exceedingly high-capacity PLATINUM datalogger stores data for up to 30 years.

■ The gateway to the world – the PLATINUM network. With separately available PLATINUM monitoring devices, you can integrate the inverters in your plant monitoring system via the EIA 485 interface.



## Technical data

Model	100 CS	100 CTL	500 CTL
<b>Input characteristics</b>			
Max. PV power	130 kW	130 kW	650 kW
Max. DC power	115.8 kW	115.8 kW	580 kW
PV voltage range MPPT	405 V–750 V	405 V–750 V	450 V–750 V
Max. DC voltage	900 V		
Max. input current	260 A	260 A	1072 A
Number of string inputs	4	4	12
Number of MPP trackers	1	1	3
DC section switch device	integrated		
Reverse battery protection	yes		
Earth leakage protection	Isolation control		
<b>Output characteristics</b>			
Nominal AC power (Cos Phi = 1)	100 kW	100 kW	500 kW
Nominal AC intensity	144 A	262 A	1050 A
Max. AC power (Cos Phi = 1)	110 kW	110 kW	519 kW
Max. AC intensity	161 A	326 A	1104 A
Feed operation starts at	600 W	300 W	200 W
Mains output voltage range	3 AC 400 V (+10 %/-15 %)	3 AC 220 V IT (+10 %/-15 %)	3 AC 275 V IT (+10 %/-15 %)
Internal consumption at night	lower than 3 W	lower than 3 W	lower than 7 W
AC frequency	50 Hz (+2/-4 %)		
Short-circuit proof	yes		
Cos Phi (Medium voltage directive)	0.9 i to 0.9 c		
Earth leakage protection	RCD		
<b>Interfaces</b>			
DC input	Screw terminals		
AC output	Screw terminals		
PLATINUM network	EIA 485, 2 x RJ 45 Western Modular add. plug connector with screw terminals		
Service interface	EIA 232, SubD 9-pole socket		
Potential-free contact	1 Change-over contact, max. 24 V <sub>ac</sub> /2 A, plug connector with screw terminals		
<b>Appliance data</b>			
Max. conversion efficiency	96.8 %	98.4 %	98.5 %
European efficiency	95.7 %	97.5 %	98.2 %
Weight	1,162 kg	560 kg	1,900 kg
Dimensions	H 1,800 x W 1,000 x D 800 mm   H 1,970 x W 3,000 x D 820 mm		
Working temperature range	-10 °C to +65 °C		
Max. temperature during nominal power	+45 °C		
Storage temperature	-10 °C to +65 °C		
Protection type (except digital interface)	IP 20 according to DIN EN 60529		
Optical display	Full graphic LCD 170 x 76 pixels		
Integrated datalogger	Storage capacity sufficient for 30 yrs operating time		
Circuit concept	NF-transformer transformerless transformerless		
Accessories	on request (example stringbox)		
<b>Type designation</b>	<b>100 CS</b>	<b>100 CTL</b>	<b>500 CTL</b>

subject to changes



## Diehl AKO

is an internationally leading electronics company which specializes in the development and production of industrial control and regulating systems.

As the market leader, every year we manufacture more than 2 million frequency inverters for power drive systems alone.

## Innovation & quality

**Diehl AKO** sets standards for the development of **innovative concepts** for electronic systems and appliances by established know-how, the selection of component parts and the latest technologies of excellent production and test engineering. From the electronics to the complete appliance, the manufacturing process of our products is certified according to

the **Quality and environment standards**

**ISO 9001-2000 and ISO 14000.**

All **PLATINUM string inverters** are built in excellent industrial quality. Therefore we give a standard 5-year guarantee for our string inverters. For all **S- and TL-models** we give optional even a **10-year guarantee**. For string inverters there is an optional warranty extension to 20 years.



## Environmental protection

*Environmental protection has top priority for **Diehl AKO**. In order to live up to this standard, **Diehl AKO** continually improves manufacturing processes and optimizes the use of resource-friendly materials.*

*The products are manufactured in compliance with the new RoHS standard and the environment standard DIN EN 14001. **PLATINUM string inverters** were the first appliances on the market to be produced using **lead-free** technology.*



## PLATINUM plant monitoring –

*much more than just access to your data.*



## Diehl AKO Stiftung & Co. KG

Pfannerstraße 75  
D-88239 Wangen im Allgäu

Phone: +49 7522 73 700  
Fax: +49 7522 73 710

Mailto: [platinum@diehlako.de](mailto:platinum@diehlako.de)  
[www.diehl.com/photovoltaics](http://www.diehl.com/photovoltaics)