

Technical data

Model	2100 S	2800 S	3100 S	3800 S	4300 S	4301 S	4600 S	4601 S	3801 TL	3800 TL	4300 TL	4800 TL	5300 TL	6300 TL	7200 TL	13000 TL	16000 TL	19000 TL	22001 TL	22000 TL	11000 TL3	13000 TL3	17000 TL3	20000 TL3	100 CS	100 CTL	500 CTL
Input characteristics																											
Max. PV power	2,300 Wp	3,200 Wp	3,450 Wp	4,200 Wp	4,800 Wp	4,800 Wp	5,100 Wp	5,100 Wp	4,000 Wp	4,300 Wp	4,900 Wp	5,400 Wp	6,000 Wp	7,100 Wp	8,000 Wp	14,700 Wp	18,000 Wp	21,300 Wp	23,000 Wp	24,000 Wp	11,000 Wp	13,600 Wp	18,100 Wp	21,200 Wp	130 kW	130 kW	650 kW
Max. DC power	2,100 W	2,800 W	3,100 W	3,800 W	4,300 W	4,300 W	4,600 W	4,600 W	3,480 W	3,800 W	4,300 W	4,800 W	5,300 W	6,300 W	7,200 W	12,900 W	15,900 W	18,900 W	20,800 W	21,600 W	10,300 W	12,800 W	16,900 W	19,650 W	115.8 kW	115.8 kW	580 kW
PV voltage range MPPT	206 V–390 V	313 V–630 V	314 V–630 V	315 V–630 V	320 V–630 V	277 V–470 V	320 V–630 V	278 V–470 V	349 V–710 V	350 V–710 V	351 V–710 V	348 V–710 V	349 V–710 V	350 V–710 V	351 V–710 V	351 V–710 V	349 V–710 V	350 V–710 V	351 V–710 V	351 V–710 V	380 V–850 V	420 V–850 V	445 V–850 V	480 V–850 V	405 V–750 V	405 V–750 V	450 V–750 V
Max. DC voltage	480 V	780 V	780 V	780 V	780 V	580 V	780 V	580 V	880 V												900 V						
Max. input current	9.0 A	9.0 A	9.0 A	12.0 A	12.5 A	15.0 A	13.0 A	16.0 A	10.5 A	11.5 A	13.0 A	14.5 A	16.0 A	18.5 A	21.0 A	3 x 13.0 A	3 x 16.0 A	3 x 18.5 A	3 x 20.2 A	3 x 21.0 A	29.0 A	30.0 A	38.5 A	41.0 A	260 A	260 A	1072 A
Number of string inputs	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	6	6	9	9	9	4	4	6	6	4	4	12
Number of MPP trackers	1								1												3						
DC section switch device	Optional DC disconnector, integrated in the device								Optional DC disconnector, integrated in the device												DC disconnector, integrated in the device						
Reverse polarity protection	yes								yes												yes						
Earth leakage protection	Isolation control (shiftable)								Isolation control												Isolation control						
Output characteristics																											
Nominal AC power (Cos Phi = 1)	1,750 W	2,400 W	2,550 W	3,300 W	3,680 W	3,680 W	3,800 W	3,800 W	3,330 W	3,680 W	4,120 W	4,600 W	5,000 W	6,000 W	6,900 W	12,360 W	15,000 W	18,000 W	20,000 W	20,700 W	10,000 W	12,400 W	16,500 W	19,200 W	100 kW	100 kW	500 kW
Nominal AC current	7.6 A	10.4 A	11.1 A	14.3 A	16.0 A	16.0 A	16.5 A	16.5 A	14.5 A	16.0 A	17.9 A	20.0 A	21.7 A	26.1 A	30.0 A	17.9 A	21.7 A	26.1 A	29.0 A	30.0 A	14.5 A	18.0 A	23.9 A	27.8 A	144 A	262 A	1050 A
Max. AC power (Cos Phi = 1)	1,900 W	2,600 W	2,800 W	3,600 W	4,050 W	4,050 W	4,200 W	4,200 W	3,330 W	3,680 W	4,120 W	4,600 W	5,000 W	6,000 W	6,900 W	12,360 W	15,000 W	18,000 W	20,000 W	20,700 W	10,000 W	12,400 W	16,500 W	19,200 W	110 kW	110 kW	519 kW
Max. AC current	8.3 A	11.3 A	12.2 A	15.7 A	17.6 A	17.6 A	18.3 A	18.3 A	14.5 A	16.0 A	17.9 A	20.0 A	21.7 A	26.1 A	30.0 A	17.9 A	21.7 A	26.1 A	29.0 A	30.0 A	18.0 A	18.0 A	29.0 A	29.0 A	161 A	326 A	1104 A
Feed operation starts at	13 W	14 W	14 W	18 W	18 W	17 W	18 W	17 W	7 W	7 W	7 W	7 W	7 W	8 W	8 W	21 W	21 W	24 W	24 W	24 W	20 W				600 W	300 W	200 W
Mains output voltage range	230 V (+/- 20 %)								230 V (+/- 20 %)												3 AC 230 V/400 V + N (+/- 20 %)						
Internal consumption at night	lower than 2.5 W								lower than 2 W												lower than 6 W						
AC frequency	50 Hz (+/-5 %)								50 Hz (+/-5 %)												50 Hz/60 Hz (+/-5%)						
Short-circuit proof	yes								yes												yes						
Cos Phi (Medium voltage directive)	1								0.9 i to 0.9 c												0.9 i to 0.9 c						
Earth leakage protection	no								RCD												RCD						
Interfaces																											
DC input	Multicontact MC4								Multicontact MC4												Multicontact MC4						
AC output	Wieland RST 3i/5i								Spring clamp connectors												Phoenix plug connector (supplied)						
PLATINUM network	EIA 485, 2 x RJ 45 Western Modular add. plug connector with screw terminals								EIA 485, 2 x RJ 45 Western Modular add. plug connector with screw terminals												EIA 485, 2 x RJ 45 Western Modular add. plug connector with screw terminals						
Service interface	EIA 232, SubD 9-pole socket								EIA 232, SubD 9-pole socket												EIA 232, SubD 9-pole socket, USB						
Potential-free contact	1 NO contact, max. 24 V _{ac} /2 A, plug connector with screw terminals								1 Change-over contact, max. 24 V _{ac} /2 A, plug connector with screw terminals												1 Change-over contact, max. 24 V _{ac} /2 A, plug connector with screw terminals						
Appliance data																											
Maximum efficiency	94.7 %	95.3 %	95.3 %	95.6 %	95.6 %	94.6 %	95.6 %	94.6 %	97.7%	97.7%	97.7 %	97.7 %	97.7 %	98.0 %	98.0 %	97.7 %	97.7 %	98.0 %	98.0%	98.0 %	98.0 %	98.0 %	98.2 %	98.2 %	96.8 %	98.4 %	98.5 %
European efficiency	93.7 %	94.4 %	94.4 %	94.6 %	94.7 %	93.9 %	94.8 %	93.8 %	97.4%	97.4%	97.4 %	97.4 %	97.4 %	97.5 %	97.5 %	97.4 %	97.4 %	97.5 %	97.5%	97.5 %	97.4 %	97.5 %	97.8 %	97.8 %	95.7 %	97.5 %	98.2 %
Weight	30 kg	35 kg	35 kg	42 kg	42 kg	43 kg	42 kg	43 kg	27 kg	27 kg	27 kg	28 kg	28 kg	29 kg	29 kg	81 kg	84 kg	87 kg	87 kg	87 kg	39 kg	39 kg	40 kg	40 kg	1162 kg	560 kg	1900 kg
Dimensions	H 720 x W 320 x D 250 mm								H 720 x W 320 x D 250 mm												H 743 x W 972 x D 262 mm						
Working temperature range	-20 °C to +60 °C								-20 °C up to +60 °C												-25 °C up to +55 °C						
Maximum temperature at nominal power	+45 °C								+45 °C												+50 °C						
Storage temperature	-25 °C to +80 °C								-25 °C up to +80 °C												-20 °C up to +70 °C						
Protection type (except digital interface)	IP 54 according to DIN EN 60529								IP 66 according to DIN EN 60529												IP 65 according to DIN EN 60529						
Optical display	Full graphic LCD 170 x 76 pixels								Full graphic LCD 170 x 76 pixels												Full graphic LCD 170 x 76 pixels						
Integrated datalogger	Storage capacity sufficient for 30 yrs operating time								Storage capacity sufficient for 30 yrs operating time												Storage capacity sufficient for 30 yrs operating time						
Circuit concept	NF-transformer, RAC-MPP technology, ENS according to VDE 0126-1-1								Transformerless, DIVE®, RAC-MPP® technology												Transformerless, 3-phased high-performance topology						
Type designation	2100 S	2800 S	3100 S	3800 S	4300 S	4301 S	4600 S	4601 S	3801 TLD	3800 TLD	4300 TLD	4800 TLD	5300 TLD	6300 TLD	7200 TLD	13000 TLD	16000 TLD	19000 TLD	22001 TLD	22000 TLD	11000 TL3R	13000 TL3R	17000 TL3R	20000 TL3R	100 CS	100 CTL	500 CTL

Currently more than 45 countries are supported.
You will find the current list for the type designation on our website in the download center under category, certificate, overview.

PLATINUM
INVERTER



Our sun your yield with consistency



STRING INVERTERS

Inverter

- Uncompromising top-class efficiency up to 98,5 %
- Wide range of 27 models from 2 to 500 kW
- Top industrial quality

Optional
Warranty
20 years



PLATINUM®

Monitoring of PV plants

- Extreme reliability
- High stable yields even under difficult conditions

LARGE INVERTERS



PV-MONITOR



WEBMASTER-HOME

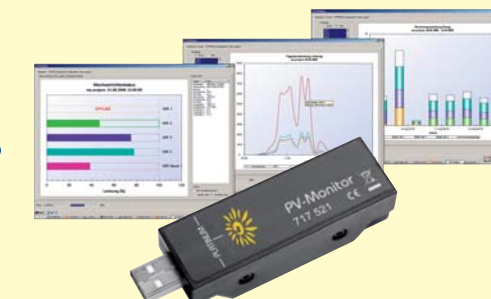
- Intelligent appliances
- Flexibly fitted to your needs

VIEWMASTER



Smart Home
- Decentralized energy management
- Self consumption of solar energy
- Numbers of current consumers can be controlled
- Accessable via PC, internet and smart phone technologies

WEBMASTER



Diehl AKO Stiftung & Co. KG

Pfannerstraße 75
D-88239 Wangen im Allgäu

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

Mailto: platinum@diehl-controls.com
www.diehl.com/photovoltaics

our common future