



PV Grid-tied Inverter (Central Inverter)

SolarOcean 100TL/100/250TL/250/500TL

LEADING-EDGE TECHNOLOGY

- Max. efficiency 98.7%
- Wide DC voltage
- Using effective IGBT power module
- Optimal MPPT technology
- Suitable for applications under harsh power grid conditions
- Low frequency transformer for isolation
- Advanced DSP digital control techniques
- Cost-effective guarantee for the PV power plant system

FLEXIBILITY

- Easy for local setting
- Multi-lingual LCD monitoring
- Multi-communication interfaces
- Friendly interface, easy to install and maintain

BUILT TO LAST

- Comprehensive protection for overvoltage, islanding, short-circuit, overloading, overheating

CERTIFICATES

- 2006/95/EC, CNCA/CTS-0006-2010 (CQC) (Idt IEC 62109-1:2010, EN 61000-6-1/2/3/4, 2004/108/EC, EN 50178/IEC62109-1/-2, EN 61000-3-2/-3, IEC62116, IEC 61727, EN 50160, EN 50178/IEC62109-1, ENEL2010, RD1663 (2000), IEC62109-1, Refer to VDE0126-1-1



SAMIL POWER
Expert for PV Grid-tied Inverters

Datasheet of SolarOcean Series

Inverter Model	SolarOcean 100TL	SolarOcean 100	SolarOcean 250TL	SolarOcean 250	SolarOcean 500TL
Input (DC)					
Max. DC power [kW]	115	115	285	285	570
Max. DC voltage [V]	880/1000 (optional)	880/1000 (optional)	880/1000 (optional)	880/1000 (optional)	1000
Max. input current [A]	250	250	600	600	1200
MPPT voltage range (full load) [V]	450-820				
Numbers of MPPT	1				
Strings per MPPT	2	2	8	8	8
Output (AC)					
Rated AC power [kW]	100	100	250	250	500
Max. AC power [kW]	110	110	275	275	550
Max. AC current [A]	235	160	590	400	1200
Rated AC voltage/range [V]	270/243-297	400/360-440	270/243-297	400/360-440	270/243-297
Rated AC frequency/range [Hz]	50/45-55				
Power factor (cos ϕ)	0.9 lagging...0.9 leading				
THDi (at rated power)	<3%				
Efficiency					
Max. efficiency	98.0%	97.1%	98.1%	96.8%	98.7%
Euro efficiency	97.7%	96.3%	97.5%	96.0%	98.3%
MPPT efficiency	99.9%				
Protection					
Input disconnection device	DC breaker				
Output disconnection device	AC breaker				
DC overvoltage protection/ AC overvoltage protection	Class II				
Grid monitoring	Yes				
Ground fault monitoring	Optional				
Insulation monitoring	Optional				
Surge arrester for auxiliary supply	Yes				
Protection class (as per IEC 62103)/ overvoltage category (as per IEC 60664-1)	Class I/II				
General Data					
Topology	transformerless	transformer	transformerless	transformer	transformerless
Dimensions (WxHxD) [mm/in]	1160x1970x900/ 45.7x77.6x35.4	1160x1970x900/ 45.7x77.6x35.4	2200x2180x850/ 86.6x85.8x33.5	2200x2180x850/ 86.6x85.8x33.5	2100x2180x850/ 82.7x85.8x33.5
Weight [kg/lb]	530/1168	935/2061	1700/3748	2200/4850	1800/3968
Operating temperature range [°C/°F]	-20-+50/-4-122	-20-+50/-4-122	-20-+50/-4-122	-20-+50/-4-122	-30-+55/-22-131
External auxiliary supply voltage	230/400V (L-N-PE/L-L-PE)				
Cooling	Fan				
Ingress protection (IP)	IP20				
Humidity (non-condensing)	5%-95%				
Altitude [m]	3000				
Display	Touch screen				
Communication	RS485 (standard)/CAN (standard)/Ethernet (optional)				
Warranty (5/10/15/20/25 years)	standard/optional/optional/optional/optional/optional				
Certificates	2006/95/EC, CNCA/CTS-0006-2010 (CQC) (Idt IEC 62109-1:2010, EN 61000-6-1/2/3/4, 2004/108/EC, EN 50178/IEC62109-1/-2, EN 61000-3-2/-3, IEC62116, IEC 61727, EN 50160, EN 50178/IEC62109-1, ENEL2010, RD1663 (2000), IEC62109-1, Refer to VDE0126-1-1				

