

AN INVERTER FAMILY WITH A WIDE RANGE OF OUTPUTS FROM 2.5 TO 10 KW

2.5TL / 3TL / 3.3TL / 3.68TL / 4.6TL / 5TL / 6TL / 7.5TL / 8.2TL / 8.6TL / 10TL

A new family of single-phase transformerless inverters, intended for the residential sector and for larger, decentralised projects.

Wide range of AC power outputs

The INGECON® SUN Lite TL single phase inverters offer an extensive range of power outputs from 2.5 to 10 kW. As a new addition, this range of inverters can now be supplied for 7.5 kW, 8.2 kW, 8.6 kW and 10 kW.

Simple installation and maintenance

Fast-on connectors on the DC side (type 4) and the AC side and RS-485 serial communications. The country-specific configuration and language can be easily selected from the inverter screen.

The INGECON® SUN Lite TL TL inverters feature an internal datalogger for three months' data storage with control from either a remote PC or on-site from the inverter front keypad through its LCD screen. Status and alarm LED indicators. Fans are easily replaceable by the user. Configurable for self-consumption mode.

Software included

Included at no extra cost are the INGECON® SUN Manager, INGECON® SUN Monitor and its iSun Monitor smartphone version for monitoring and recording the inverter data over the internet.

Standard 5 year warranty, extendable for up to 25 years

PROTECTIONS

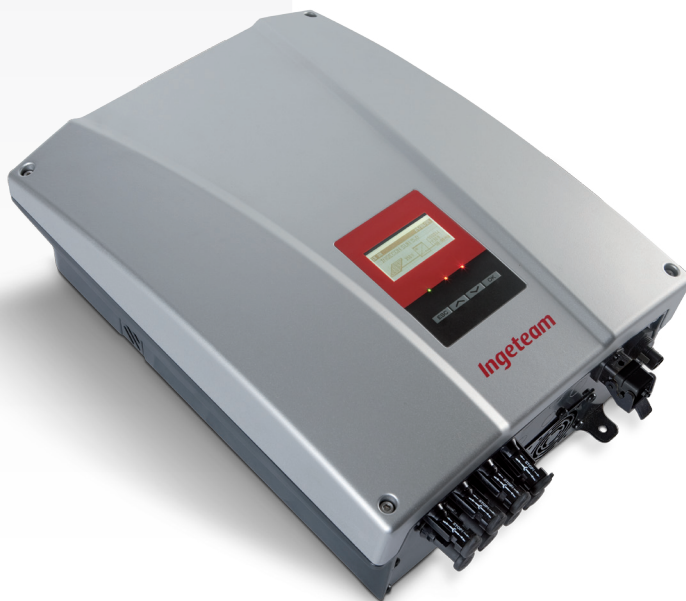
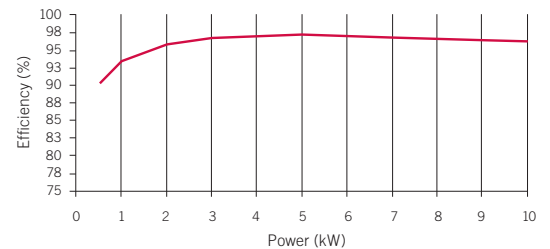
- Reverse polarity.
- Overvoltages at the AC output with type 3 surge arresters.
- Output short circuits and overloads.
- Insulation failures.
- Anti-islanding with automatic shutdown.

OPTIONAL ACCESSORIES

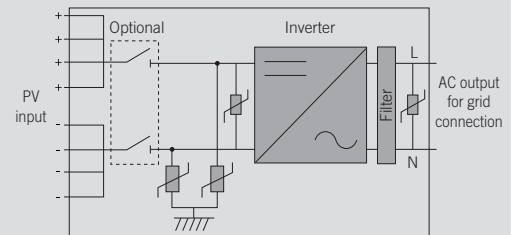
- DC breaker.
- Inter-inverter communication via Ethernet or Bluetooth.
- GSM/GPRS remote communication.
- Potential free contact for insulation fault indication (by default) or inverter connected to the grid (optional).

EFFICIENCY

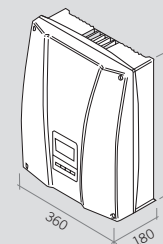
INGECON® SUN 10TL
V_{dc} = 330 V



Lite TL



Size and weight (mm)



2.5TL / 3TL
18.3 kg.

3.3TL / 3.68TL
19.7 kg.

4.6TL / 5TL / 6TL
23.3 kg.

7.5TL / 8.2TL / 8.6TL / 10TL
25.2 kg.

	2.5TL	3TL	3.3TL	3.68TL	4.6TL	5TL
Input (DC)						
Recommended PV array power range ⁽¹⁾	2.8 - 3.3 kWp	3.2 - 4 kWp	3.8 - 4.3 kWp	3.9 - 4.8 kWp	5.2 - 6 kWp	5.7 - 6.5 kWp
Voltage range MPP	160 - 450 V	195 - 450 V	155 - 450 V	175 - 450 V	145 - 450 V	160 - 450 V
Voltage range DC ⁽²⁾	125 - 550 V	125 - 550 V	125 - 550 V	125 - 550 V	125 - 550 V	125 - 550 V
Maximum current DC	17 A	17 A	22 A	22 A	33 A	33 A
DC inputs	3	3	3	3	4	4
MPPT	1	1	1	1	1	1
Output (AC)						
Rated power AC ⁽³⁾	2.7 kW	3 kW	3.63 kW	3.68 kW	5 kW	5.5 kW
Maximum current AC	13 A	13.5 A	17 A	17 A	24.2 A	26.2 A
Rated voltage AC	230 / 240 V	230 / 240 V	230 / 240 V	230 / 240 V	230 / 240 V	230 / 240 V
Frequency AC	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Phi Cosine	1	1	1	1	1	1
Phi Cosine adjustable	Yes. Smax=2.7 kVA	Yes. Smax=3 kVA	Yes. Smax=3.63 kVA	Yes. Smax=3.68 kVA	Yes. Smax=5 kVA	Yes. Smax=5.5 kVA
THD	<3%	<3%	<3%	<3%	<3%	<3%
Efficiency						
Maximum efficiency	96.6%	96.6%	96.8%	96.8%	97%	97%
Euroefficiency	95%	95.1%	95.2%	95.2%	96%	96.1%
General Information						
Air cooling	30 m ³ /h	30 m ³ /h	45 m ³ /h	45 m ³ /h	90 m ³ /h	90 m ³ /h
Stand-by consumption ⁽⁵⁾	<10 W	<10 W	<10 W	<10 W	<10 W	<10 W
Consumption at night	0 W	0 W	0 W	0 W	0 W	0 W
Ambient temperature	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C
Relative humidity (non-condensing)	0 - 95%	0 - 95%	0 - 95%	0 - 95%	0 - 95%	0 - 95%
Protection class	IP65	IP65	IP65	IP65	IP65	IP65

	6TL	7.5TL	8.2TL	8.6TL	10TL
Input (DC)					
Recommended PV array power range ⁽¹⁾	6.3 - 7 kWp	8.7 - 10.3 kWp	9.5 - 11.2 kWp	10 - 11.8 kWp	11.6 - 13.7 kWp
Voltage range MPP	190 - 450 V	215 - 450 V	235 - 450 V	245 - 450 V	300 - 450 V
Voltage range DC ⁽²⁾	125 - 550 V	125 - 550 V	125 - 550 V	125 - 550 V	125 - 550 V
Maximum current DC	33 A	35 A	35 A	35 A	35 A
DC inputs	4	4	4	4	4
MPPT	1	1	1	1	1
Output (AC)					
Rated power AC ⁽³⁾	6 kW	7.5 kW	8.2 kW	8.6 kW	10 kW
Maximum current AC	26.2 A	36.1 A	36.1 A	36.1 A	36.1 A
Rated voltage AC	230 / 240 V	208 / 230 / 240 / 277 V ⁽⁴⁾	230 / 240 / 277 V ⁽⁴⁾	240 / 277 V ⁽⁴⁾	277 V
Frequency AC	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Phi Cosine	1	1	1	1	1
Phi Cosine adjustable	Yes. Smax=6 kVA	Yes. Smax=7.5 kVA	Yes. Smax=8.2 kVA	Yes. Smax=8.6 kVA	Yes. Smax=10 kVA
THD	<3%	<3%	<3%	<3%	<3%
Efficiency					
Maximum efficiency	97%	97.5%	97.6%	97.65%	98%
Euroefficiency	96.1%	96.5%	96.55%	96.6%	96.8%
General Information					
Air cooling	90 m ³ /h	90 m ³ /h	90 m ³ /h	90 m ³ /h	90 m ³ /h
Stand-by consumption ⁽⁵⁾	<10 W	<10 W	<10 W	<10 W	<10 W
Consumption at night	0 W	0 W	0 W	0 W	0 W
Ambient temperature	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C
Relative humidity (non-condensing)	0 - 95%	0 - 95%	0 - 95%	0 - 95%	0 - 95%
Protection class	IP65	IP65	IP65	IP65	IP65

Notes: ⁽¹⁾ Depending on the type of installation and geographical location ⁽²⁾ Must not be exceeded under any circumstances. Consider the voltage increase of the 'Voc' at low temperatures ⁽³⁾ AC Power for 45°C ambient temperature ⁽⁴⁾ Voltage configurable through the display ⁽⁵⁾ Consumption from PV field.

Compliance with standards: EN50438, EN62109-1, EN62109-2, EN61000-6-2, EN61000-6-3, RD1699/2011, P.O.12.3, VDE-AR-N4105, CEI0-21, CEI11-20, VDE0126-1-1, G83/1-1, AS4777.2, AS4777.3, AS3100.