Lite

Ingecon®Sun Lite

TRANSFORMERLESS

2.5TL / 3TL / 3.3TL / 3.68TL / 3.8TL / 4.6TL / 5TL / 6TL

Best performance with minimal space usage

The **Ingecon®Sun Lite** transformerless inverters are designed to adapt to the standards and regulations in force in the different international markets. The inverters are apt for different types of installations, ranging from residential applications up to large-scale solar plants.

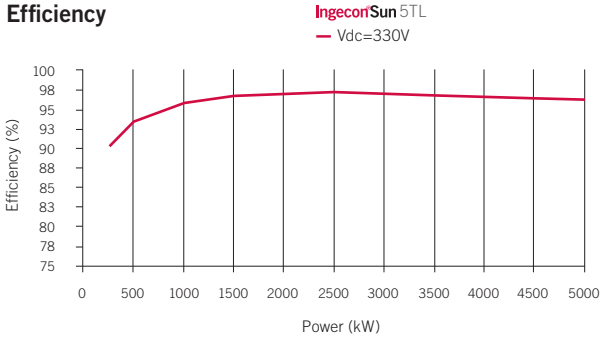
The inverters feature a molded aluminium casing, for indoor and outdoor installation and capable of withstanding extreme temperatures, and an advanced maximum power point tracker system (MPPT) to extract the maximum power from the PV array.

To facilitate installation, the inverters are equipped with fast-on connectors for the DC, AC sides and communications RS-485. No additional items are required and they can be manually disconnected from the grid.

Each inverter incorporates an internal data logger for up to 3 months data storage, which can be accessed from either a remote PC or in situ from the inverter front panel, through a keypad. This front panel also features LED status and alarm indicators and an LCD screen.

The **Ingecon®Sun Lite** transformerless inverters have been designed with components which offer a useful life of more than 20 years. They come with a standard guarantee of 5 years, which can be extended for periods to up to 25 years.

Efficiency



Protections

The **Ingecon®Sun Lite** transformerless inverters are equipped with the following electrical protections against:

- Reverse polarity.
- Input and output overvoltage.
- Output short-circuits and overloads.
- Insulation failures.
- Anti-islanding with automatic disconnection.

Optional accessories

- DC breaker.
- Inter-inverter communication via RS-485 or Ethernet.
- Modem for GSM/GPRS remote communication.
- **Ingecon®Sun Manager** software for parameter display and data recording.
- **IngeRAS™ PV** for Internet data display.
- Power free contact in the case of failure of insulation or optionally grid connected inverter.

Ingeteam

Ingeconsun Lite
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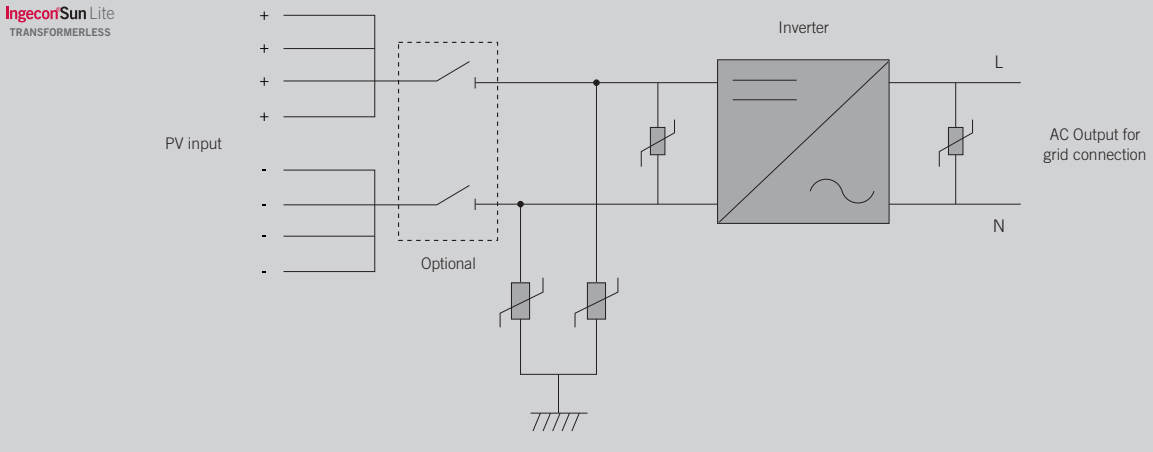
Technical data

Model	Ingeconsun 2.5TL	Ingeconsun 3TL	Ingeconsun 3.3TL	Ingeconsun 3.68TL	Ingeconsun 3.8TL	Ingeconsun 4.6TL	Ingeconsun 5TL	Ingeconsun 6TL
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	4.1 - 5 kWp	5.2 - 6 kWp	5.7 - 6.5 kWp	6.3 - 7 kWp
Voltage range MPP	160 - 450 V	195 - 450 V	155 - 450 V	175 - 450 V	140 - 450 V	145 - 450 V	160 - 450 V	190 - 450 V
Voltage range DC	125-550 V[2]	125-550 V[2]	125-550 V[2]	125-550 V[2]	125-550 V[2]	125-550 V[2]	125-550 V[2]	125-550 V[2]
Maximum current DC	16 A	16 A	22 A	22 A	33 A	33 A	33 A	33 A
DC inputs	3	3	3	3	4	4	4	4
MPPT	1	1	1	1	1	1	1	1
Output (AC)								
Rated power AC HT[3]	2.5 kW	2.8 kW	3.3 kW	3.68 kW	3.8 kW	4.6 kW	5 kW	5.4 kW
Rated power AC HP[4]	2.7 kW	3 kW	3.7 kW	3.68 kW	3.9 kW	5 kW	5.5 kW	6 kW
Maximum current AC	13 A	13.5 A	17 A	17 A	18.8 A	24.2 A	25.5 A	26.2 A
Rated voltage AC	230 V	230 V	230 V	230 V	230 V	230 V	230 V	230 V
Frequency AC	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz
Phi Cosine[5]	1	1	1	1	1	1	1	1
Phi Cosine adjustable	+/-0.9 to Pnom	+/-0.9 to Pnom	+/-0.9 to Pnom	+/-0.9 to Pnom	+/-0.9 to Pnom	+/-0.9 to Pnom	+/-0.9 to Pnom	+/-0.9 a Pnom
THD[5]	<3%	<3%	<3%	<3%	<3%	<3%	<3%	<3%
Efficiency								
Maximum efficiency	96.6%	96.6%	96.8%	96.8%	97%	97%	97%	97%
Euroefficiency	95%	95.1%	95.2%	95.2%	95.6%	96%	96.1%	96.1%
General Information								
Stand-by consumption[6]	<10 W	<10 W	<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	0 W	0 W
Ambient temperature	-20ºC to +70ºC	-20ºC to +70ºC	-20ºC to +70ºC	-20ºC to +70ºC	-20ºC to +70ºC	-20ºC to +70ºC	-20ºC to +70ºC	-20ºC a +70ºC
Relative humidity	0 - 95%	0 - 95%	0 - 95%	0 - 95%	0 - 95%	0 - 95%	0 - 95%	0 - 95%
Protection class	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65
Compliance with standards	VDE0126-1-1, EN 50178, G83/1, CEI 0-16, RD 661/2007, RTC alle rete BT di Enel Distribuzione, CEI 11-20, CEI 11-20 V1, CE Mark							

HT mode (high temperature)
Rated outputs at 45ºC

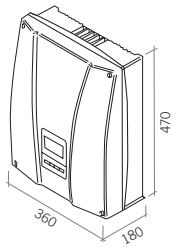
HP mode (high power)
Rated outputs at 40ºC

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] Up to 45ºC ambient temperature, Pmax= 110% Pnom for non permanent transients [4] Up to 40ºC ambient temperature, Pmax = Pnom [5] For Pout > 25% of the rated power. Possibility to modify the Phi Cosine [6] Consumption from PV field.



Size and weight
(mm)

Ingeconsun 2.5TL / 3TL	18.3 kg.
Ingeconsun 3.3TL / 3.68TL	19.7 kg.
Ingeconsun 3.8TL / 4.6TL / 5TL / 6TL	23.3 kg.



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