Ingecon'Sun Lite

TRANSFORMER

2.5 / 3.3 / 5



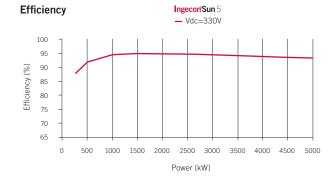
Best performance with minimal space usage

The **Ingecon®Sun Lite** inverters equipped with a galvanic isolation transformer, are compatible with the different PV module technology on the market, thereby permitting greater flexibility when sizing PV installations.

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, transformer 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 with transformer 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.



Protections

The Ingecon®Sun Lite inverters with a galvanic isolation transformer are equipped with the following electrical protections against:

- Galvanic isolation between the DC and AC side.
- 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.
- Grounding kit for those PV modules requiring this.
- PV connectors type 3 or 4.
- Power free contact in the case of failure of insulation or optionally grid connected inverter.



Technical data

Model	Ingecon'Sun 2.5	Ingecon'Sun 3.3	Ingecon'Sun 5
Input (DC)			
Recommended PV array power range ⁽¹⁾	2.8 - 3.3 kWp	3.8 - 4.3 kWp	5.8 - 6.5 kWp
Voltage range MPP	160 - 450 V	155 - 450 V	160 - 450 V
Voltage range DC	125-550 V ⁽²⁾	125-550 V ⁽²⁾	125-550 V ⁽²⁾
Maximum current DC	16 A	22 A	33 A
DC inputs	3	4	4
MPPT	1	1	1
Output (AC)			
Rated power AC HT ⁽³⁾	2.5 kW	3.3 kW	5 kW
Rated power AC HP ⁽⁴⁾	2.7 kW	3.7 kW	5.5 kW
Maximum current AC	12 A	16 A	22 A
Rated voltage AC	230 V	230 V	230 V
Frequency AC	50 Hz	50 Hz	50 Hz
Phi Cosine ⁽⁵⁾	1	1	1
Phi Cosine adjustable	+/-0.9 to Pnom	+/-0.9 to Pnom	+/-0.9 to Pnom
THD ⁽⁵⁾	<3%	<3%	<3%
Efficiency			
Maximum efficiency	94.7%	95%	95.1%
Euroefficiency	93.8%	94%	94.3%
General Information			
Stand-by consumption ⁽⁶⁾	<10 W	<10 W	<10 W
Consumption at night	0 W	o w	0 W
Ambient temperature	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C
Relative humidity	0 - 95%	0 - 95%	0 - 95%
Protection class	IP 65	IP 65	IP 65
Compliance with standards	RD 661/2007, EN 50178, G83/1, VDE 0126-1-1, CEI 11-20, CEI 11-20 V1, CEI 0-16, CE Mark		

HT mode (high temperature) Rated outputs at 45°C

HP mode (high power)
Rated outputs at 40°C

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

