

A ROBUST SOLUTION FOR OUTDOOR PV SYSTEMS

10TL / 12.5TL / 15TL / 18TL

Three phase inverter for medium sized industrial roofs and for plants with solar tracking systems.

Maximum efficiency with three independent MPPT inputs

Power conversion stage comprising three independent power modules with an advanced maximum power point tracker system (MPPT).

Robust design

Stainless steel housing for indoor and outdoor installation (IP65). Able to withstand extreme temperatures.

Easy to install

Fast-on connectors. Manual disconnection from the grid.

Easy to maintain

Internal datalogger for up to 3 months data storage. Control from either a remote PC or on-site from the inverter front key pad. Status and alarm LED indicators. LCD Screen. Useful life of more than 20 years.

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. It also includes RS-485 communications.

Standard 5 year warranty, extendable for up to 25 years

PROTECTIONS

- Reverse polarity.
- Input and output overvoltages with type 3 surge arrester monitoring.
- Output short-circuits and overloads.
- Insulation failures.
- Anti-islanding with automatic disconnection.

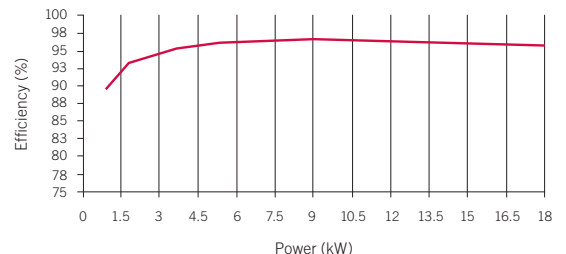
OPTIONAL ACCESSORIES

- DC breaker.
- Inter-inverter communication via Ethernet or Bluetooth.
- GSM/GPRS remote communication.
- Additional type 2 surge arrester to protect against overvoltage at the AC output.
- Potential free contact, factory set to indicate an insulation failure or, optionally, that the inverter is connected to the grid.



EFFICIENCY

INGECON® SUN 18TL
V_{dc} = 330 V

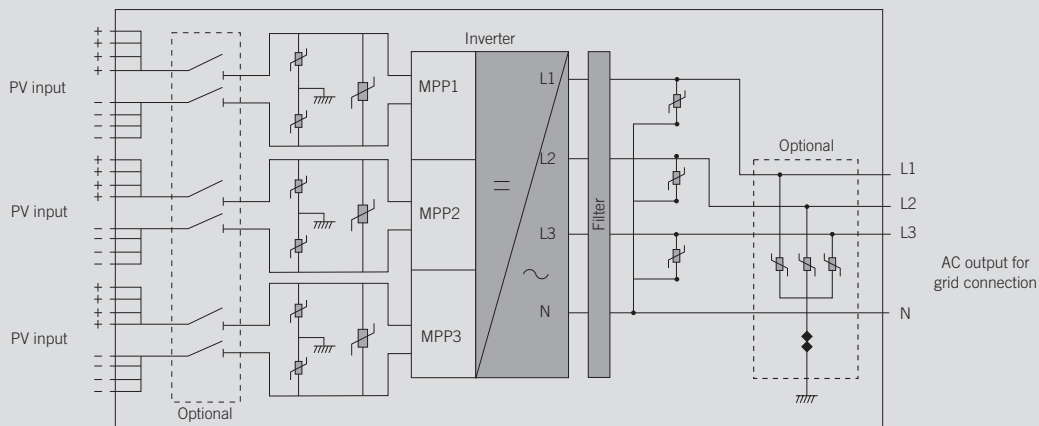


	10TL	12.5TL	15TL	18TL
Input (DC)				
Recommended PV array power range ⁽¹⁾	11.4 - 12.9 kWp	14.25 - 16.25 kWp	17.1 - 19.5 kWp	18.9 - 21 kWp
Voltage range MPP	155 - 450 V	145 - 450 V	160 - 450 V	190 - 450 V
Voltage range DC ⁽²⁾	125 - 550 V	125 - 550 V	125 - 550 V	125 - 550 V
Maximum current DC (MPPT)	22 A	33 A	33 A	33 A
DC inputs	12	12	12	12
MPPT	3	3	3	3
Output (AC)				
Rated power AC ⁽³⁾	11 kW	13.8 kW	16.5 kW	18 kW
Maximum current AC	17 A	24.2 A	25.5 A	26.2 A
Rated voltage AC ⁽⁴⁾	400 V	400 V	400 V	400 V
Frequency AC	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Phi Cosine ⁽⁵⁾	1	1	1	1
Phi Cosine adjustable	Yes. Smax=11 kVA	Yes. Smax=13.8 kVA	Yes. Smax=16.5 kVA	Yes. Smax=18 kVA
THD ⁽⁵⁾	<3%	<3%	<3%	<3%
Efficiency				
Maximum efficiency	96.8%	97%	97%	97%
Euroefficiency	95.2%	96.1%	96.1%	96.1%
General Information				
Air cooling	234 m ³ /h	234 m ³ /h	234 m ³ /h	234 m ³ /h
Stand-by consumption ⁽⁶⁾	<30 W	<30 W	<30 W	<30 W
Consumption at night	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
Relative humidity (non-condensing)	0 - 95%	0 - 95%	0 - 95%	0 - 95%
Protection class	IP65	IP65	IP65	IP65

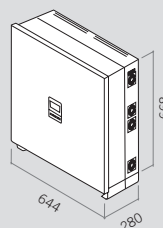
Notes: ⁽¹⁾ Depending on the type of installation and geographical location ⁽²⁾ Must not be exceeded under any circumstances. Consider the voltage increase of the 'Voc' at low temperatures ⁽³⁾ AC Power for 40°C ambient temperature ⁽⁴⁾ Voltage phase to phase neutral required ⁽⁵⁾ For P_{out}>25% of the rated power ⁽⁶⁾ Consumption from PV field.

Compliance with standards: CE, IEC61000-6-2, IEC61000-6-3, EN50178, RD1699/2011, P.O.12.3, VDE-AR-N-4105, VDE0126-1-1, CEI11-20, CEI0-21, Allegato 70 TERNA, Arrêté23-04-2008, G83/1-1.

Smart TL



Size and weight (mm)



10TL
56 kg.

12.5TL / 15TL / 18TL
65 kg.