

Ingecon[®] Sun Smart

TRANSFORMERLESS

10 TL / 12.5 TL / 15 TL / 18 TL

Technical Data

Model	Ingecon [®] Sun 10 TL	Ingecon [®] Sun 12.5 TL	Ingecon [®] Sun 15 TL	Ingecon [®] Sun 18 TL
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 - 21.0 kWp
MPPT voltage range	155 - 450 V	145 - 450 V	160 - 450 V	190 - 450 V
Maximum DC voltage ⁽²⁾	125 - 550 V	125 - 550 V	125 - 550 V	125 - 550 V
Maximum DC current	22 A (each MPPT)	33 A (each MPPT)	33 A (each MPPT)	33 A (each MPPT)
DC inputs	12	12	12	12
MPPT	3	3	3	3
Output (AC)				
AC rated power HT mode ⁽³⁾	10 kW	12.5 kW	15 kW	16.2 kW
AC rated power HP mode ⁽⁴⁾	11 kW	13.8 kW	16.5 kW	18 kW
Maximum AC current	17 A	24.2 A	25.5 A	26.2 A
AC output voltage	400 V *	400 V *	400 V *	400 V *
Output frequency	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Power factor ⁽⁵⁾	1	1	1	1
Adjustable power factor	± 0.9 at Pnom	± 0.9 at Pnom	± 0.9 at Pnom	± 0.9 at Pnom
THD (Total Harmonic Distortion) ⁽⁵⁾	< 3 %	< 3 %	< 3 %	< 3 %
Efficiency				
Maximum efficiency	96.8 %	97 %	97 %	97 %
European efficiency	95.2 %	96.1 %	96.1 %	96.1 %
General Information				
Stand-by consumption ⁽⁶⁾	< 30 W	< 30 W	< 30 W	< 30 W
Night consumption	0 W	0 W	0 W	0 W
Operating temperature	-20°C to 70°C	-20°C to 70°C	-20°C to 70°C	-20°C to 70°C
Ambient humidity	0 to 95 %	0 to 95 %	0 to 95 %	0 to 95 %
Protection class	IP 65	IP 65	IP 65	IP 65
Compliance with standards	VDE0126-1-1, RD 661/2007, EN 50178, RTC alle reti BT di Enel Distribuzione, CEI 11-20, CEI 11-20 V1, CEI 0-16, CE mark			

* Voltage between phases, neutral required

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 temperature.

(3) Up to 45°C operating temperature, Pmax = 110% Pnom in transient operating conditions.

(4) Up to 40°C operating temperature, Pmax = Pnom.

(5) For Pout > 25% of the rated power.

(6) Consumption from PV array.

HT mode (High Temperature)

Rated power at 45°C.

HP mode (High Power)

Rated power at 40°C.

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