

Ingecon[®] Sun Power Max

360 AC TRANSFORMERLESS

210HE TL / 420HE TL / 630HE TL / 840HE TL

Technical Data

Model	Ingecon [®] Sun 210HE TL	Ingecon [®] Sun 420HE TL	Ingecon [®] Sun 630HE TL	Ingecon [®] Sun 840HE TL
Input (DC)				
Recommended PV array power range ⁽¹⁾	233 - 273 kWp	466 - 546 kWp	700 - 819 kWp	933 - 1092 kWp
MPPT voltage range	524 - 820 V	524 - 820 V	524 - 820 V	524 - 820 V
Maximum DC voltage ⁽²⁾	920 V (1000 V optional)	920 V (1000 V optional)	920 V (1000 V optional)	920 V (1000 V optional)
Maximum DC current	357 A	714 A	1071 A	1428 A
DC inputs	4	8	12	16
MPPT	1	2	3	4
Output (AC)				
AC rated power HT mode ⁽³⁾	210 kW	420 kW	630 kW	840 kW
AC rated power HP mode ⁽⁴⁾	229 kW	458 kW	688 kW	917 kW
Maximum AC current	368 A	736 A	1104 A	1472 A
AC output voltage (between phases)	360 V IT system	360 V IT system	360 V IT system	360 V IT system
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	98.8 %	98.8 %	98.8 %	98.8 %
European efficiency	98.6 %	98.6 %	98.6 %	98.6 %
General Information				
Stand-by consumption ⁽⁶⁾	30 W	60 W	90 W	120 W
Night consumption	< 5 W	< 5 W	< 5 W	< 5 W
Operating temperature	-20°C to 65°C	-20°C to 65°C	-20°C to 65°C	-20°C to 65°C
Ambient humidity	0 to 95 %	0 to 95 %	0 to 95 %	0 to 95 %
Protection class	IP 20	IP 20	IP 20	IP 20
Compliance with standards	RD 661/2007, EN 50178, VDEW BT regulation, CEI 11-20, CEI 11-20 V1, CEI 0-16, CE mark			

HT mode (High Temperature)

Rated power at 45°C.

HP mode (High Power)

Rated power 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 temperature.
- (3) Up to 45°C operating temperature, Pmax = 110% Pnom in transient operating conditions. For a **MPPT voltage ≥ 600 V**.
- (4) Up to 40°C operating temperature, Pmax = Pnom. For a **MPPT voltage ≥ 660 V**.
- (5) For Pout > 25% of the rated power.
- (6) Consumption from PV array.

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