

## HIGH PERFORMANCE IN MULTI-MEGAWATT SYSTEMS

50 / 60 / 70 / 80 / 90 / 100

Three phase inverter for medium and large power outputs on-roof applications and also for ground-based multi-megawatt applications.

### Maximum efficiency at high temperatures

Advanced maximum power point tracker system (MPPT). Suitable for medium voltage installations. It stands voltage dips, it controls reactive power and other requirements.

### Pure three phase conversion stage

Balanced output in all three AC phases. No additional equipment required for simultaneous disconnection.

### Easy to install

No additional items are required. Manual disconnection from the grid.

Complete electrical protection equipment supplied as standard.

### Easy to maintain

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

### Softwares included

It includes, without any extra cost, the softwares Ingecon® Sun Manager and IngeRAS™ PV for displaying and recording the data directly from the inverter through Internet.

**Standard 5 year warranty, extendable for up to 25 years.**

#### PROTECTIONS

- Galvanic isolation between the DC and AC side.
- Reverse polarity.
- Output short-circuits and overloads.
- Insulation failures.
- Anti-islanding with automatic disconnection.
- DC breaker.
- DC fuses.
- AC thermal magnetic breaker.
- DC surge arresters.
- AC surge arresters.

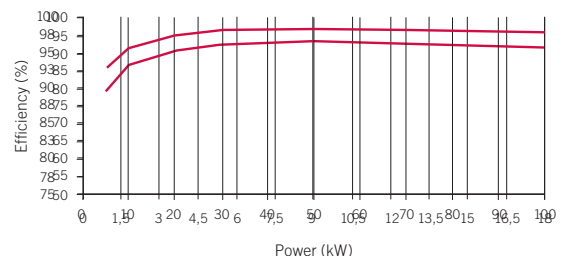
#### OPTIONAL ACCESSORIES

- Inter-inverter communication via RS-485, Ethernet or Bluetooth.
- Modem for GSM/GPRS remote communication.
- PV array string current monitoring. Ingecon® Sun String Control.
- Grounding kit if required for the PV modules.



#### PERFORMANCE

Ingecon® Sun 100  
V<sub>dc</sub> = 450 V

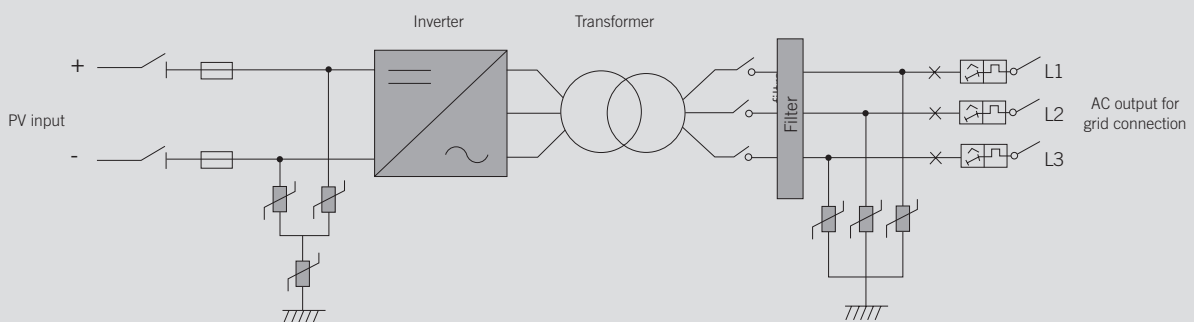


	50	60	70	80	90	100
<b>Input (DC)</b>						
Recommended PV array power range <sup>(1)</sup>	52 - 65 kWp	63 - 78 kWp	73 - 91 kWp	83 - 104 kWp	93 - 117 kWp	104 - 130 kWp
Voltage range MPP	405 - 750 V	405 - 750 V	405 - 750 V	405 - 750 V	405 - 750 V	405 - 750 V
Maximum voltage DC <sup>(2)</sup>	900 V	900 V	900 V	900 V	900 V	900 V
Maximum current DC	130 A	156 A	182 A	208 A	234 A	260 A
DC inputs	4	4	4	4	4	4
MPPT	1	1	1	1	1	1
<b>Output (AC)</b>						
Rated power AC HT <sup>(3)</sup>	50 kW	60 kW	70 kW	80 kW	90 kW	100 kW
Rated power AC HP <sup>(4)</sup>	55 kW	66 kW	77 kW	88 kW	99 kW	110 kW
Maximum current AC	93 A	118 A	131 A	156 A	161 A	161 A
Rated voltage AC	400 V	400 V	400 V	400 V	400 V	400 V
Frequency AC	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Phi Cosine <sup>(5)</sup>	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
THD <sup>(6)</sup>	<3%	<3%	<3%	<3%	<3%	<3%
<b>Efficiency</b>						
Maximum efficiency	96.3%	96.40%	97.20%	97.50%	96.90%	96.80%
Euroefficiency	94.30%	94.70%	96.10%	96.20%	95.80%	95.70%
<b>General Information</b>						
Air cooling	2,600 m <sup>3</sup> /h	2,600 m <sup>3</sup> /h	2,600 m <sup>3</sup> /h	2,600 m <sup>3</sup> /h	2,600 m <sup>3</sup> /h	2,600 m <sup>3</sup> /h
Stand-by consumption <sup>(7)</sup>	30 W	30 W	30 W	30 W	30 W	30 W
Consumption at night	1 W	1 W	1 W	1 W	1 W	1 W
Ambient temperature	-20°C to +65°C	-20°C to +65°C	-20°C to +65°C	-20°C to +65°C	-20°C to +65°C	-20°C to +65°C
Relative humidity	0 - 95%	0 - 95%	0 - 95%	0 - 95%	0 - 95%	0 - 95%
Protection class	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20

**Notes:** <sup>(1)</sup> Depending on the type of installation and geographical location <sup>(2)</sup> Must not be exceeded under any circumstances. Consider the voltage increase of the 'Voc' at low temperatures <sup>(3)</sup> Up to 45°C ambient temperature, Pmax= 110% Pnom for non permanent transients <sup>(4)</sup> Up to 40°C ambient temperature, Pmax = Pnom <sup>(5)</sup> For Pout > 25% of the rated power. Possibility to modify the Phi Cosine <sup>(6)</sup> For Pout > 25% of the rated power and voltage in accordance with IEC 61000-3-4 <sup>(7)</sup> Consumption from PV field.

**Compliance with standards:** CE, IEC61000-6-2, IEC61000-6-4, EN50178, RD1699/2011, P.O.12.3, VDE-AR-N-4105, Reglamento MT BDEW, VDE0126-1-1, CEI11-20, CEI0-21, Allegato 17 TERNA, Arrêté 23-04-2008.

**HT Mode (high temperature)** Rated outputs at 45°C **HP Mode (high power)** Rated outputs at 40°C



**Size and weight (mm)**

