

THE INTELLIGENT SOLUTION FOR OUTDOOR INSTALLATIONS

15 U 208 / 25 U 208

The INGECON® SUN Smart 15 U / 25 U combine a rugged stainless steel housing for use in outdoor installations (NEMA 3R) with the versatility of an extensive range of power ratings, making it ideal for installations of all sizes.

Ease of maintenance

Inverter maintenance is exceedingly simple, due to the fact that the electronics block is easily replaceable from the exterior. The inverter pure three phase conversion stage offers a balanced output in all three AC phases, with no additional equipment required for simultaneous disconnection.

Rugged design

The inverters feature a stainless steel 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. The INGECON® SUN Smart inverters have been designed with components which offer a useful life of more than 20 years.

Software included

It includes, without any extra cost, RS-485 communications as well as the software INGECON® SUN Manager, INGECON® SUN Monitor and its iSun Monitor Smartphone version for monitoring, displaying and recording the data from the inverter through the Internet. Each inverter incorporates an internal data logger for up to 3 months data storage, which can be accessed from a remote PC.

Standard 5 year warranty, extendable for up to 20 years



PROTECTIONS

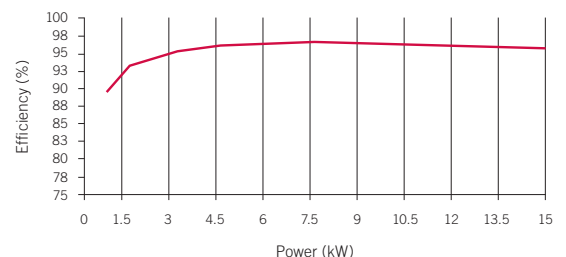
- Reverse polarity.
- Output short-circuits and overloads.
- Insulation failures.
- Anti-islanding with automatic disconnection.
- DC breaker.
- Voltage surge arresters class II at the DC and AC sides.
- Plus/minus grounding PV modules.
- Galvanic isolation between the DC and AC sides.
- AC magneto-thermal breaker.

OPTIONAL ACCESSORIES

- Inter-inverter communication via Ethernet. For other communications, please check availability.
- DC input combiner, 10 inputs (only available for INGECON® SUN Smart 15 U).

EFFICIENCY

INGECON® SUN 15 U 480
V_{dc} = 300 V



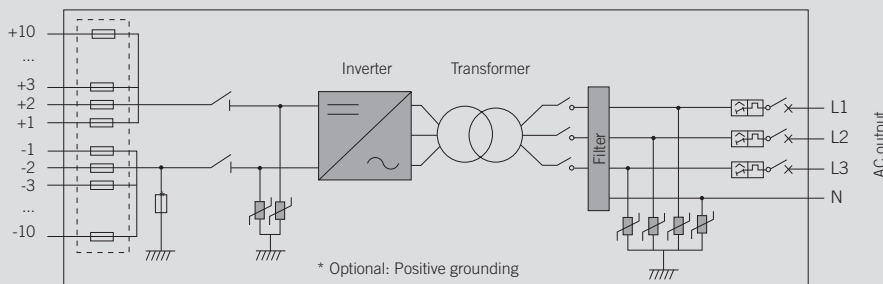
	15 U 208	15 U 480	25 U 208	25 U 480
Input (DC)				
Recommended PV array power range ⁽¹⁾	16 - 20 kWp	16 - 20 kWp	26 - 33 kWp	26 - 33 kWp
Voltage range MPP	300 - 550 V	300 - 550 V	300 - 550 V	300 - 550 V
Maximum voltage DC ⁽²⁾	600 V	600 V	600 V	600 V
Maximum current DC	52 A	52 A	87 A	87 A
DC inputs	2 ⁽³⁾	2 ⁽³⁾	2	2
MPPT	1	1	1	1
Output (AC)				
Rated power AC ⁽⁴⁾	15 kW	15 kW	25 kW	25 kW
Maximum current AC	47 A	20 A	78 A	34 A
Rated voltage AC	208 V	480 V	208 V	480 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=15 kVA	Yes. Smax=15 kVA	Yes. Smax=25 kVA	Yes. Smax=25 kVA
THD ⁽⁶⁾	<3%	<3%	<3%	<3%
Efficiency				
Maximum efficiency	94.3%	94.4%	96.1%	95.9%
CEC - Weighted efficiency	93.5%	93.5%	95.5%	95.5%
General Information				
Air cooling	674 m ³ /h	674 m ³ /h	674 m ³ /h	674 m ³ /h
Stand-by consumption ⁽⁷⁾	30 W	30 W	30 W	30 W
Consumption at night	1 W	1 W	1 W	1 W
Ambient temperature	5°F to 131°F (-15°C to 65°C)	5°F to 131°F (-15°C to 65°C)	5°F to 131°F (-15°C to 65°C)	5°F to 131°F (-15°C to 65°C)
Max. altitude ⁽⁸⁾	9,842 ft (3,000 m)	9,842 ft (3,000 m)	9,842 ft (3,000 m)	9,842 ft (3,000 m)
Relative humidity (non-condensing)	0 - 95%	0 - 95%	0 - 95%	0 - 95%
Protection class	NEMA 3R	NEMA 3R	NEMA 3R	NEMA 3R

Notes: ⁽¹⁾ Depending on the type of installation and geographical location ⁽²⁾ Consider the voltage increase of the 'Voc' at low temperatures ⁽³⁾ Multi-string option ⁽⁴⁾ AC power for 113°F (45°C) ambient temperature. The output power will be reduced at the rate of 1% for each 1°F (0.56°C) of increase ⁽⁵⁾ For P_{out}>25% of the rated power ⁽⁶⁾ For P_{out}>25% of the rated power and voltage in accordance with IEEE 1547.1 ⁽⁷⁾ Consumption from PV field ⁽⁸⁾ Over 3,280 ft (1,000 m) temperature for rated power (113°F / 45°C) is reduced 2.42 °F each 1,000 ft.

Compliance with standards: UL1741, CSA C22.2 n°107.1-01, IEEE 1547, IEEE 1547.1, FCC Part 15B (class A).

Smart U

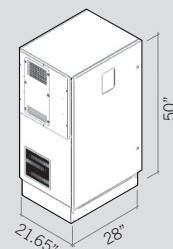
Multistring version



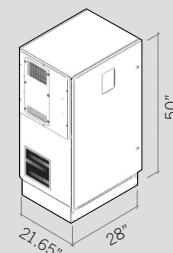
Size and weight

(inches and pounds)

15 U
551 pounds



25 U
714 pounds



Smart U

