

## THE BEST PERFORMANCE AT MEDIUM AND LARGE OUTDOOR INSTALLATIONS

### 125TL U 208 Outdoor / 165TL U 275 Outdoor 200TL U 330 Outdoor / 220TL U 360 Outdoor

Designed for ease of maintenance, capable of withstanding extreme temperatures, and featuring full electric protections as a standard supply, the INGECON® SUN Power TL U Outdoor inverters are one of the latest Ingeteam's developments. They have been especially designed for medium and large outdoor installations.

#### Easy to install and maintain

The INGECON® SUN Power TL U Outdoor inverters have been manufactured with components which offer a useful life of more than 20 years. These inverters are equipped with an advanced maximum power point tracking system (MPPT) to obtain the maximum power from the PV

array. No additional items are required and they can be manually disconnected from the grid.

#### Software included

They include, 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 either a remote PC or on-site from the inverter front panel, through a keypad.

**Standard 5 year warranty, extendable for up to 20 years**



#### PROTECTIONS

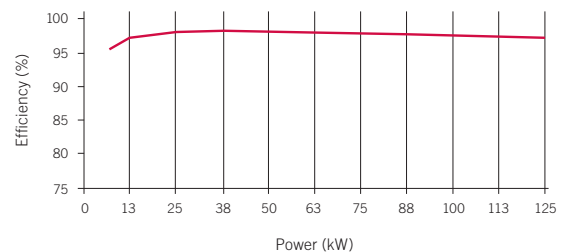
- Reverse polarity.
- Output short-circuits and overloads.
- Insulation failures.
- Anti-islanding with automatic disconnection.
- DC breakers.
- AC thermal-magnetic breaker.
- DC, AC surge arresters, class II.

#### OPTIONAL ACCESSORIES

- Inter-inverter communication via Ethernet. For other communications, please check availability.
- DC fuses.
- Equipped with a synchronous kit that enables to connect several inverters to the same transformer.

#### EFFICIENCY

INGECON® SUN 125TL U 208 Outdoor  
V<sub>dc</sub> = 330 V

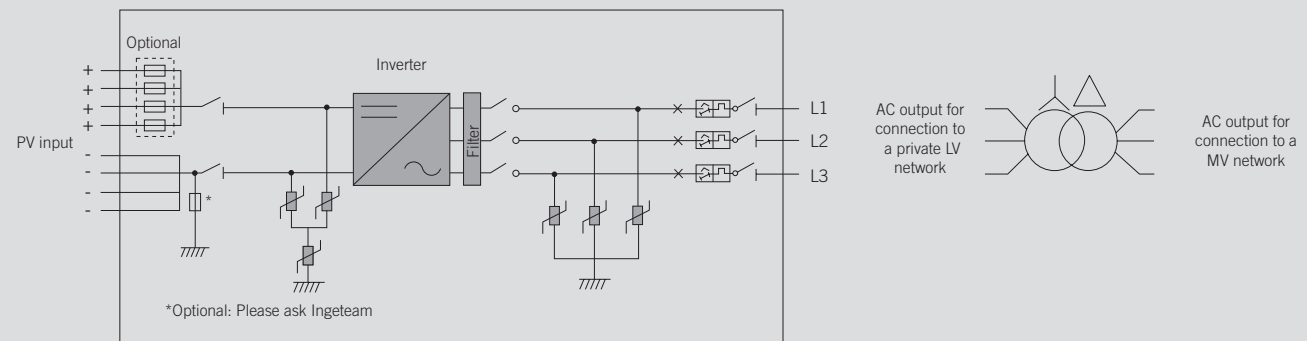


	125TL U 208 Outdoor	165TL U 275 Outdoor	200TL U 330 Outdoor	220TL U 360 Outdoor
<b>Input (DC)</b>				
Recommended PV array power range <sup>(1)</sup>	127 - 168 kWp	167 - 221 kWp	203 - 268 kWp	223 - 295 kWp
Voltage range MPP	330 - 820 V	440 - 820 V	525 - 820 V	570 - 820 V
Maximum voltage DC <sup>(2)</sup>	1,000 V	1,000 V	1,000 V	1,000 V
Maximum current DC	390 A	390 A	390 A	390 A
DC inputs	4	4	4	4
MPPT	1	1	1	1
<b>Output (AC)</b>				
Rated power AC <sup>(3)</sup>	125 kW	165 kW	200 kW	220 kW
Maximum current AC	347 A	347 A	350 A	352 A
Rated voltage AC	208 V IT System	275 V IT System	330 V IT System	360 V IT System
Frequency AC	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Phi Cosine <sup>(4)</sup>	1	1	1	1
Phi Cosine adjustable	Yes. Smax=125 kVA	Yes. Smax=165 kVA	Yes. Smax=200 kVA	Yes. Smax=220 kVA
THD <sup>(5)</sup>	<3%	<3%	<3%	<3%
<b>Efficiency</b>				
Maximum efficiency	98.4%	98.6%	98.7%	98.7%
CEC	97.5%	98%	98.5%	98.5%
<b>General Information</b>				
Air cooling	15.2 ft <sup>3</sup> /s	15.2 ft <sup>3</sup> /s	15.2 ft <sup>3</sup> /s	15.2 ft <sup>3</sup> /s
Stand-by consumption <sup>(6)</sup>	30 W	30 W	30 W	30 W
Consumption at night	1 W	1 W	1 W	1 W
Ambient temperature	-4°F to 149°F (-20°C to 65°C)	-4°F to 149°F (-20°C to 65°C)	-4°F to 149°F (-20°C to 65°C)	-4°F to 149°F (-20°C to 65°C)
Max. altitude <sup>(7)</sup>	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:** <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> AC power for 122°F (50°C) ambient temperature. The output power will be reduced at the rate of 1% for each 1°F (0.56°C) of increase <sup>(4)</sup> For P<sub>out</sub>>25% of the rated power <sup>(5)</sup> For P<sub>out</sub>>25% of the rated power and voltage in accordance with IEEE 1547.1 <sup>(6)</sup> Consumption from PV field <sup>(7)</sup> Over 3,280 ft (1,000 m) temperature for rated power (122°F / 50°C) is reduced 2.42 °F each 1,000 ft.

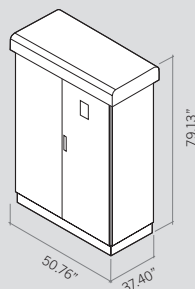
**Compliance with standards:** UL 1741, IEEE 1547, NEC 690, ANSI/NEMA 70, CE, CODE, FCC Part 15B (class A).

**PowerTL U**



**Size and weight**

(inches and pounds)



125TL U 208 Outdoor / 165TL U 275 Outdoor  
200TL U 330 Outdoor / 220TL U 360 Outdoor  
1,435 pounds