

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 datalogger 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

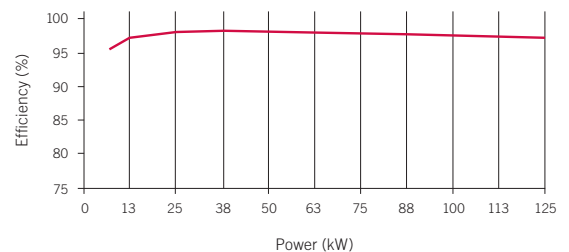
- Reverse polarity.
- Output short-circuits and overloads.
- Insulation failures.
- Anti-islanding with automatic disconnection.
- AC circuit breaker.
- DC breakers.
- AC and DC surge arresters, type 2.
- Plus / minus grounding PV modules.

OPTIONAL ACCESSORIES

- Inter-inverter communication via Ethernet. For other communications, please check availability.
- DC fuses.
- Motorization of the AC breaker.
- Auxiliary services kit.
- Low voltage ride-through kit.
- -30 °C (-22 °F) operating kit.
- Night supply.
- INGECON® SUN String Control for PV array string current monitoring.
- Synchronization available with other inverters, to connect to the same MV transformer.

EFFICIENCY

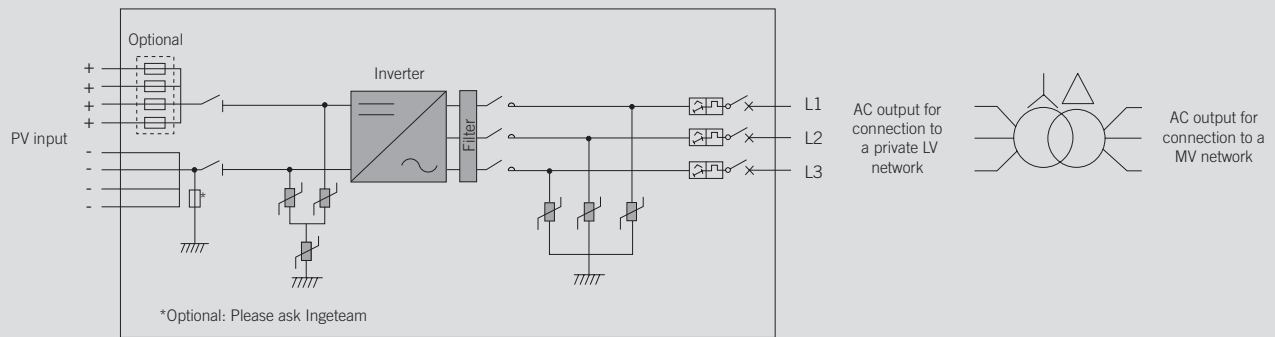
INGECON® SUN 125TL U 208 Outdoor
V_{dc} = 330 V



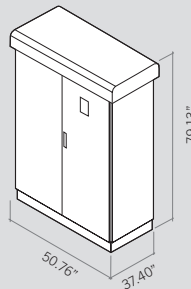
| | 125TL U 208 Outdoor | 165TL U 275 Outdoor | 200TL U 330 Outdoor | 220TL U 360 Outdoor |
|---|---|-----------------------------------|-----------------------------------|-----------------------------------|
| Input (DC) | | | | |
| Recommended PV array power range ⁽¹⁾ | 128.5 - 167.1 kWp | 168.6 - 219.2 kWp | 203.9 - 265.1 kWp | 223.9 - 291.1 kWp |
| Voltage range MPP | 330 - 820 V | 440 - 820 V | 525 - 820 V | 570 - 820 V |
| Maximum voltage ⁽²⁾ | 1,000 V | 1,000 V | 1,000 V | 1,000 V |
| Maximum current | 390 A | 390 A | 390 A | 390 A |
| Inputs | 4 | 4 | 4 | 4 |
| MPPT | 1 | 1 | 1 | 1 |
| Output (AC) | | | | |
| Rated power ⁽³⁾ | 125 kW | 165 kW | 200 kW | 220 kW |
| Maximum current | 347 A | 346 A | 350 A | 353 A |
| Rated voltage | 208 V IT System | 275 V IT System | 330 V IT System | 360 V IT System |
| Frequency | 50 / 60 Hz | 50 / 60 Hz | 50 / 60 Hz | 50 / 60 Hz |
| Phi Cosine ⁽⁴⁾ | 1 | 1 | 1 | 1 |
| Phi Cosine adjustable | Yes. Smax=125 kVA | Yes. Smax=165 kVA | Yes. Smax=200 kVA | Yes. Smax=220 kVA |
| THD ⁽⁵⁾ | <3% | <3% | <3% | <3% |
| Efficiency | | | | |
| Maximum efficiency | 98.4% | 98.6% | 98.7% | 98.7% |
| CEC | 97.5% | 98% | 98.5% | 98.5% |
| General Information | | | | |
| Air cooling | 15.2 ft³/s | 15.2 ft³/s | 15.2 ft³/s | 15.2 ft³/s |
| Stand-by consumption ⁽⁶⁾ | 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 ⁽⁷⁾ | 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 |
| Marking | CE, ETL | | | |
| EMC and security standards | UL1741, FCC Part 15, IEEE C37.90.1, IEEE C37.90.2 | | | |
| Grid connection standards | IEC 62116, UL1741, IEEE1547, IEEE1547.1, NEC CODE | | | |

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 temperatures ⁽³⁾ 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 ⁽⁴⁾ For P_{out}>25% of the rated power ⁽⁵⁾ For P_{out}>25% of the rated power and voltage in accordance with IEEE 1547.1 ⁽⁶⁾ Consumption from PV field ⁽⁷⁾ Over 3,280 ft (1,000 m) temperature for rated power (122 °F / 50 °C) is reduced 2.42 °F each 1,000 ft.

Power TL U Outdoor



Size and weight
(inches and lbs)



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200TL U 330 Outdoor / 220TL U 360 Outdoor
1,435 lbs