INGECON SUN 3Play

MULTI-MPPT STRING INVERTER WITH THE MAXIMUM POWER DENSITY

INGECON® SUN 330-350TL M12

Greater cost-effectiveness
Thanks to its greater output power, the new INGECON® SUN 330-350TL M12 allows to drastically reduce the number of inverters required for designing a PV power plant. Thus, it minimises the labour cost and reduces the global cabling cost.

Moreover, it does not require DC combiner boxes, ensuring the mínimum possible CAPEX (Capital Expenditures). Furthermore, its string inverter philosophy permits an easy and immediate replacement that does not require qualified technicians.

Higher flexibility and power density
The highest flexibility thanks to its maximum DC voltage (1,500 V) and to its wide voltage range MPP (850-1,300 V).Awesome power density, with up to 350 kW.

Long-lasting and rugged design
Aluminium casing, especially conceived for indoor and outdoor applications (IP66). The INGECON® SUN 330-350TL M12 inverters have been designed to guarantee a long life expectancy and to withstand extreme temperatures.

Wi-Fi communication as standard
The inverter features Wi-Fi communication as standard. This Wi-Fi interface is used to commission the inverter through the INGECON® SUN Monitor App, available for iOS and Android. A wizard guides the user through the entire start-up process. Moreover, the Wi-Fi interface allows connecting the inverter to any Wi-Fi network available in the plant for monitoring purposes.

SPE (Single Pair Ethernet)
The inverter features SPE communication as standard. The SPE offers high-speed IP communication without the 100-meter distance limitation of standard Ethernet. Using SPE, the communication with the inverters can be established up to 1,000 meters. Moreover, these inverters enables daisy chain connection. Thus, several inverters can be connected to the same SPE line. The versatility and possibilities offered by the SPE are an important improvement at the plant's communication network.

Remote monitoring
The inverter can be monitored with the www.ingeconsunmonitor.com website or with the INGECON® SUN Monitor App.

www.ingeteam.com
solar.energy@ingeteam.com

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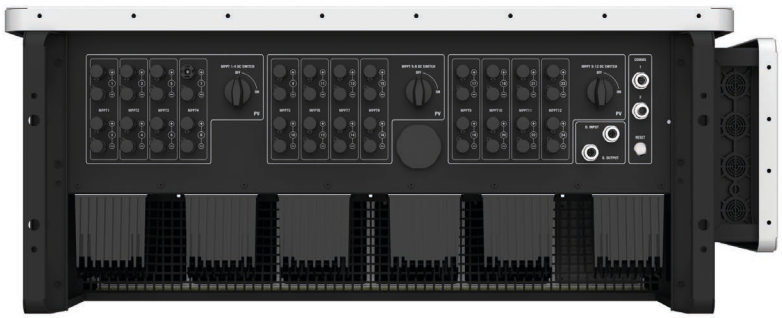
INGECON® SUN 330-350TL M12

Fully equipped
In order to achieve the maximum performance with the maximum cost-effectiveness, the INGECON® SUN 330-350TL M12 inverter is supplied totally equipped with all the electrical protections.

Integrated components

Photovoltaic connectors	✓
DC switch (3 units)	✓
DC surge arresters, type II	✓
AC surge arresters, type II	✓
Strings current metering kit	✓
Wi-Fi communication	✓
SPE (Single Pair Ethernet) communication	✓



MAIN FEATURES

- 12 MPPTs.
- PID recovery as standard.
- Reactive power injection at night as standard.
- Low-voltage ride-through capability.
- Reactive power capability.
- Compatible with external Cloud Connect software.
- 99.05% maximum efficiency.
- Single Pair Ethernet and Wi-Fi communications supplied as standard.
- Integrated Webserver.
- Software INGECON® SUN Monitor for PV plant monitoring.
- Suitable for indoor and outdoor installations (IP66).
- High temperature performance.
- One digital input and one digital output.

PROTECTIONS

- Shortcircuits and overloads at the output.
- Anti-islanding with automatic disconnection.
- Insulation faults.
- AC overvoltages with type II surge arresters.
- DC overvoltages with type II surge arresters.

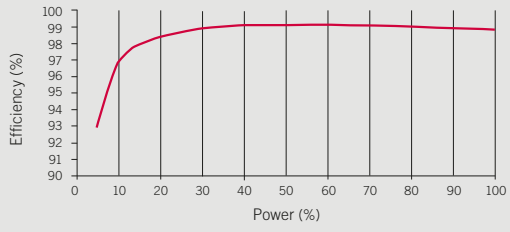
BENEFITS

- Greater power density.
- Greater cost-effectiveness thanks to the cabling cost reduction.
- High availability compared to central inverters.
- High efficiency rates.
- Easy maintenance.

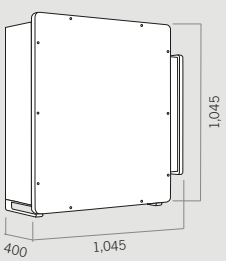
	330TL M12	350TL M12
Input (DC)		
Operating voltage range	700 - 1,500 V	
MPP voltage range	850 - 1,300 V	
Maximum voltage	1,500 V	
Maximum current per MPPT	45 A x 12	
Number of inputs per MPPT	2	
Number of MPPTs	12	
Output (AC)		
Rated power	330.5 kVA	346.4 kVA
Maximum current	238.5 A	250 A
Ambient temperature for rated power	40 °C	37 °C
Rated voltage	3 / PE, 800 V	
Frequency	50 / 60 Hz	
Type of grid	IT	
Power factor	1	
Power factor adjustable(1)	Yes, 0 - 1 (leading / lagging)	
THD (Total Harmonic Distortion)(2)	<3%	
Efficiency		
Maximum efficiency	99.05%	
Euroefficiency	98.60%	
General information		
Cooling system	Forced ventilation	
Air flow	900 m³/h	
Stand-by consumption	25 kW	
Operation temperature	-30 °C to 60 °C	
Relative humidity (non-condensing)	0 - 100%	
Protection class	IP66 / NEMA 4	
Residual current monitoring unit	Yes	
Maximum operating altitude	4,000 m	
Connection	AC connection: max. cross section: 400 mm² (one cable) DC connection: 6 mm² MC4-Evo2 (10 mm² optional)	
Marking	CE	
EMC and safety standards	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61000-3-2, EN 61000-3-3, EN 61000-3-11, EN 61000-3-12, EN 62109-1, EN 62109-2, IEC62103, EN 50178, FCC Part 15, IEC60068-2-1:2007, IEC60068-2-2:20007, IEC60068-2-14:2009, IEC60068-2-30:2005, IEC62116, IEC61683 y EN50530	
Grid connection standards	DIN V VDE V 0126-1-1, EN 50439, EN 50549, CEI 0-21, CEI 0-16 VDE-AR-N 4105:2011-08, P.O.12.3, BDEW, IEC 62116, IEC 61727, UNE 206007-1, ABNT NBR 16149, ABNT NBR 16150, Brazilian Grid Code, South African Grid Code, Chilean Grid Code, DEWA 2.0, Jordanian Grid Code, G99, VDE-AR-4110, NTS de REE, Directive EU 2016/631	

Notes: (1) Extended adjustment range for nominal working points (2) For rated AC power and voltage in accordance with IEC 61000-3-4.

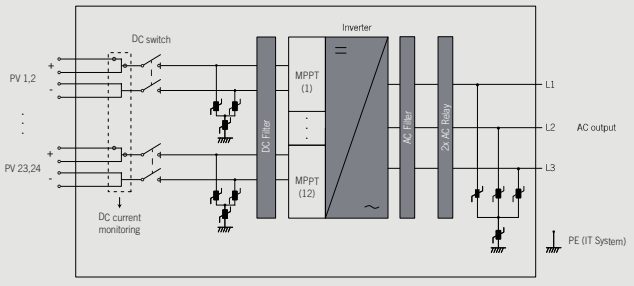
Efficiency INGECON® SUN 330-350TL M12



Size and weight (mm)



330-350TL M12
150 kg.



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