



Product Certificate Number	20266-25-CER
Applicant	Ingeteam Power Technology S.A. - Energy Avenida Ciudad De La Innovación, 13. 31621. Sarriguren. Navarra. SPAIN
Series	INGECON SUN 3Play TL Series
Models/	INGECON SUN 100TL, INGECON SUN 125TL, INGECON SUN 160TL
Type of generating unit	Photovoltaic Inverter
Technical Data	See page 2, 3 and 4
Network connection code	Egyptian Wind farm grid connection code: March 2014.

Having assessed the test report number 11505-25-TR and 20266-2-TR performed by CERE (Nº 1239/LE2396 and Nº 5314.01) based on the requirements of the EN ISO/IEC 17025:2005.

The above-mentioned generating unit complies with the requirements of the:

Egyptian Wind farm grid connection code: **March 2014**

This certification is according the CERE internal process PET-CERE-09 Rev 17 based on the requirements of the EN ISO/IEC 17065:2012. For this certification process the conformity assessment activities were based on:

- Testing of production samples selected by CERE.
- Audit of quality system according ISO 9001 with certificate number: 0. 04. 12231 issued by a certification body accredited according EN ISO/IEC 17021.
- Inspection of the manufacturing process.

This certificate cancels and supersedes the certificate number 11505-25-CER-E1 issued on May 30, 2019

Madrid, October 25, 2019. This certificate is valid until August 02, 2020

Miguel Martínez Lavín
Certification Manager

Technical data

INGETEAM INGECON SUN 100TL

DC INPUT					
Recommended PV-Power	92.7 - 160 kWp	97.9 - 160 kWp	103-160 kWp	108.2 - 160 kWp	113.3 - 160 kWp
Voltage range MPP	513 - 850 V	541.5 - 850 V	570 - 850 V	598.5 - 850 V	627 - 850 V
Maximum Voltage	1100 V				
Max. DC Current	185 A				
Max. DC short-circuit Current	240 A				
Inputs (STD / PRO)	1/24				
MPPT	1				
AC OUTPUT					
Rated Power @ rated Vac	90 kW	95 kW	100 kW	105 kW	110 kW
Max. temperature @ rated P	50°C				
Max. Current	145 A				
Rated Voltage	360 V	380 V	400 V	420 V	440 V
Frequency	50 Hz				
Power Factor	1				
Power Factor adjustable	Yes. Smax=90 kVA Qmax=54 kVAR	Yes. Smax=95 kVA Qmax=57 kVAR	Yes. Smax=100 kVA Qmax=60 kVAR	Yes. Smax=105 kVA Qmax=63 kVAR	Yes. Smax=110 kVA Qmax=66 kVAR
THD	<3%				

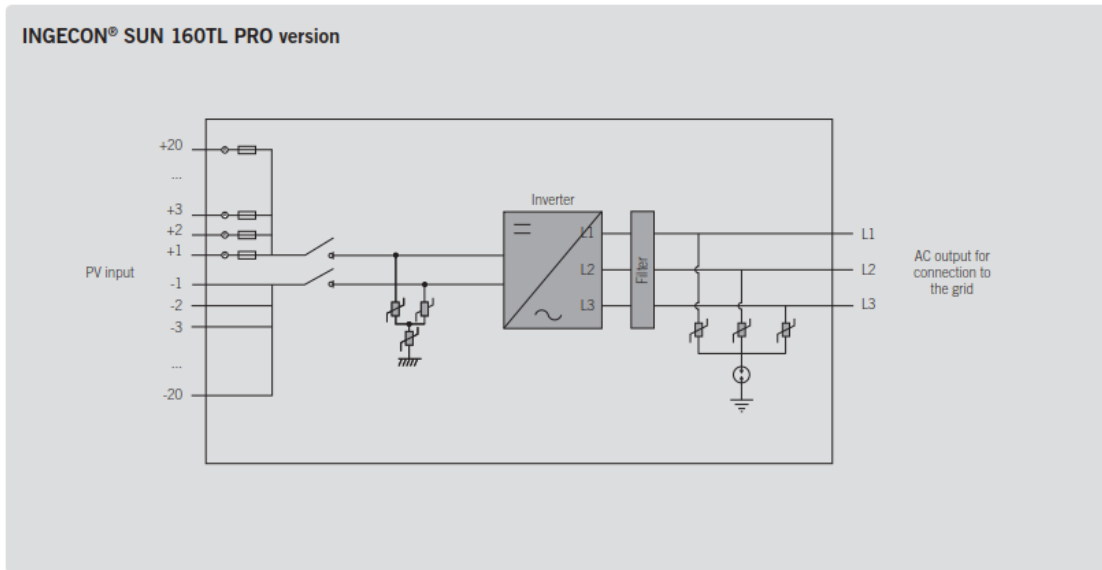
125TL

DC INPUT					
Recommended PV-Power	86.4 - 122 kWp	103 - 145 kWp	129-182 kWp	136 - 192 kWp	149 - 210 kWp
Voltage range MPP	570 - 1250 V	685 - 1250 V	860 - 1250 V	900 - 1250 V	985 - 1250 V
Maximum Voltage	1500 V				
Max. DC Current	150 A				
Max. DC short-circuit Current	195 A				
Inputs (STD / PRO)	1/20				
MPPT	1				
AC OUTPUT					
Rated Power @ rated Vac	84 kW	100 kW	125 kW	132 kW	144 kW
Max. temperature @ rated P	50°C				
Max. Current	121 A				
Rated Voltage	400 V	480 V	600 V	630 V	690 V
Frequency	50 / 60 Hz				
Power Factor	1				
Power Factor adjustable	Yes. Smax=84 kVA Qmax=50 kVAR	Yes. Smax=100 kVA Qmax=60 kVAR	Yes. Smax=125 kVA Qmax=75 kVAR	Yes. Smax=132 kVA Qmax=79 kVAR	Yes. Smax=144 kVA Qmax=86 kVAR
THD	<3%				

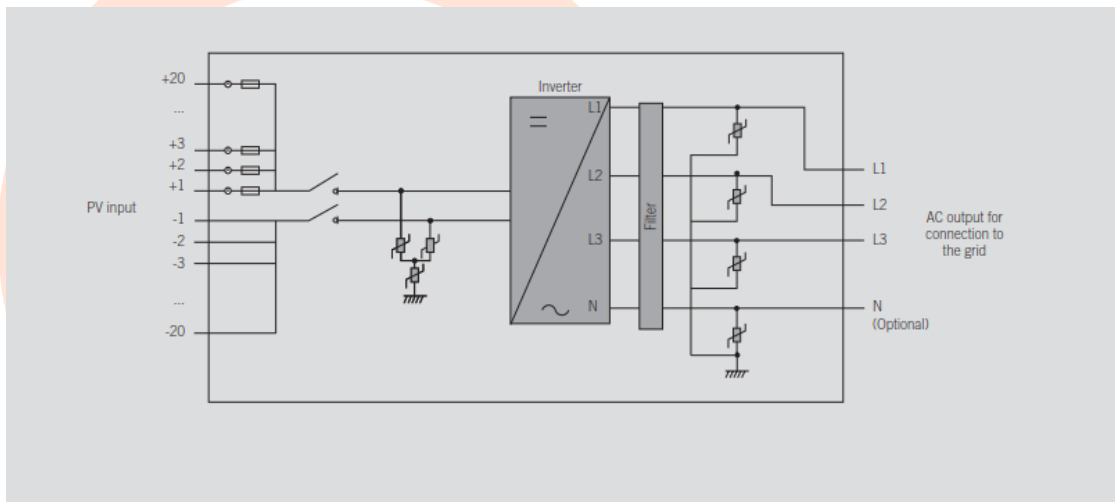
160TL

DC INPUT						
Recommended PV-Power	95-136 kWp	113-162.5 kWp	141-203 kWp	148 - 213 kWp	153.5-220 kWp	162-233.5 kWp
Voltage range MPP	570 - 850 V	685 - 1000 V	860-1250 V	900 - 1250 V	928 - 1250 V	985 - 1250 V
Maximum Voltage	1500 V					
Max. DC Current	200 A					
Max. DC short-circuit Current	250 A					
Inputs (STD / PRO)	1/20					
MPPT	1					
AC OUTPUT						
Rated Power 25°C/40°C/50°C	92.8 kW/85.9 kW/83.8 kW	111.4 kW/103.1 kW/100.6 kW	139.3 kW/128.9 kW/125.8 kW	146.2 kW/135.3 kW/132 kW	150.9 kW/139.6 kW/136.2 kW	160.1 kW/148.2 kW/144.6 kW
Max. Current 25°C/40°C/50°C	134 A/124 A/121 A					
Rated Voltage	400 V	480 V	600 V	630 V	650 V	690 V
Frequency	50 / 60 Hz					
Power Factor	1					
Power Factor adjustable	Yes, 0.8-1 (leading/lagging)					
THD	<3%					

Electrical Diagram of INGECON SUN 160TL PRO version



Electrical Diagram of INGECON SUN 100 TL PRO version and 125TL PRO version



The sample selected to test was representative of the production.
The sample was selected in:

Ingeteam Power Technology S.A.
Pol. Ind. El Juncanillo nave 1
E-31293. Sesma. Navarra. SPAIN

Sample Report Number:

20266-TM
11505-1-TM

The inspection of manufacturing process was performed in:
On June 20, 2019

Ingeteam Power Technology S.A.
Pol. Ind. El Juncanillo nave 1
E-31293. Sesma. Navarra. SPAIN

Inspection Report Number:

10978-19-1-IF