

Product Certificate Number	11505-8-CER
Applicant	Ingeteam Power Technology S.A. - Energy Avenida Ciudad De La Innovación, 13. 31621. Sarriguren. Navarra. SPAIN
Model/	INGECON SUN 100TL
Series/	INGECON SUN 3Play TL Series
Type of generating unit	Photovoltaic Inverter
Technical Data	See page 2
Network connection rule	IEC 61683: 1999 Photovoltaic systems. Power conditioners. Procedure for measuring efficiency

Having assessed the test report number: 11505-8-TR performed by Certification Entity for Renewable Energies, S.L. (EA Accredited Laboratory Nº 1239/LE2396) based on the requirements of the EN ISO/IEC 17025:2005.

The above-mentioned generating unit complies with the requirements of the: **IEC 61683: 1999** Photovoltaic systems. Power conditioners. Procedure for measuring efficiency

This certification is according the CERE internal process PET-CERE-09 Rev 10 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.

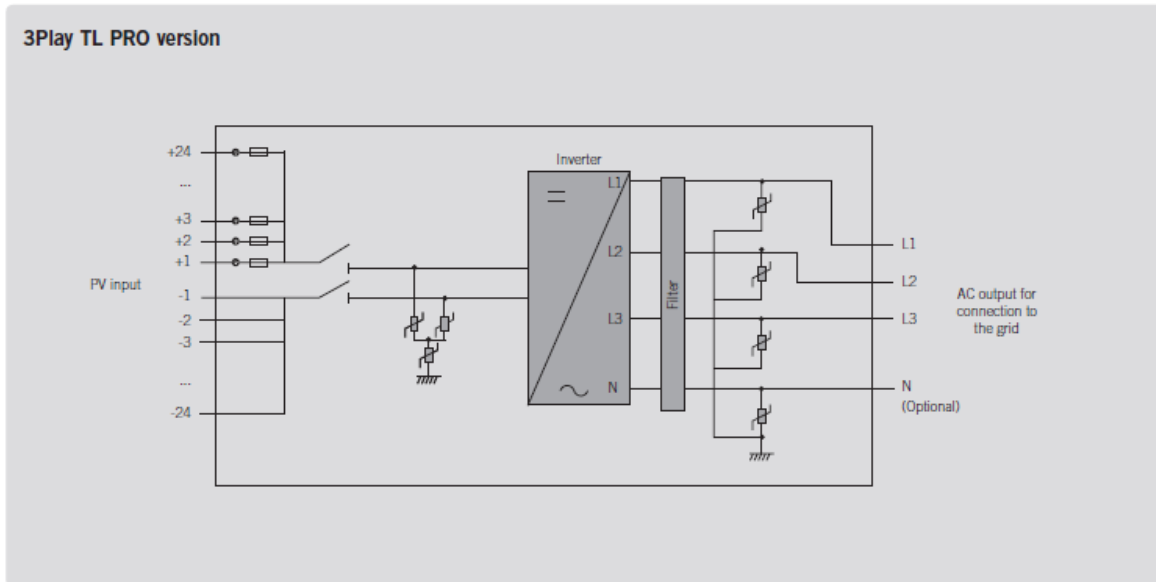
Madrid at July 17, 2017. This certificate is valid until July 17, 2020

Miguel Martínez Lavín
Certification Manager

INGETEAM INGECON SUN 100TL

DC INPUT	
Recommended PV-Power	103-160 kWp
Voltage range MPP	570 - 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	100 kW
Max. temperature @ rated P	50°C
Max. Current	145 A
Rated Voltage	400 V
Frequency	50 Hz
Power Factor	1
Power Factor adjustable	Yes. Smax=100 kVA Qmax=60 kVAR
THD	<3%

Electrical Diagram of INGETEAM INGECON SUN 100TL



Manufacturer:

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

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

April 24, 2017

Sample Report Number:

11505-1-TM

The inspection of manufacturing process was performed in
manufacture facilities:

June 27, 2017

Inspection Report Number:

11505-IF

0,9 Vdcmax = 765 V ±50 V Measure = 766,71 V								
% P _n	P _{aDC} (kW)	P _{aAC} (kW)	η _p (%)	P _{fDC} (kW)	P _{fAC} (kW)	η _c (%)	Ripple	THD
5	7,23	6,70	92,67	7,23	6,70	92,66	21,19	0,39
10	12,19	11,69	95,93	12,19	11,69	95,93	28,05	0,58
20	22,28	21,79	97,80	22,28	21,79	97,80	30,53	0,68
25	27,19	26,60	97,85	27,19	26,60	97,85	31,70	0,68
30	34,40	33,78	98,21	34,40	33,78	98,21	33,89	0,78
50	54,60	53,71	98,37	54,60	53,71	98,37	39,26	0,89
75	76,20	75,05	98,49	76,21	75,05	98,48	45,50	0,96
100	97,50	96,23	98,69	97,51	96,23	98,68	54,13	1,06
Euroefficiency		98,02 %						
No-load losses		422,83 V						
Standby loss		--						

Vdcnom = 600 V ±50 V Measure = 602,34 V								
% P _n	P _{aDC} (kW)	P _{aAC} (kW)	η _p (%)	P _{fDC} (kW)	P _{fAC} (kW)	η _c (%)	Ripple	THD
5	7,28	6,92	95,06	7,28	6,92	95,03	16,91	0,58
10	12,30	11,92	96,88	12,30	11,91	96,85	20,45	0,58
20	22,40	22,01	98,26	22,41	22,01	98,22	23,50	0,68
25	26,96	26,50	98,29	26,96	26,49	98,26	24,84	0,68
30	34,48	34,03	98,71	34,48	34,02	98,67	27,47	0,78
50	54,03	53,33	98,70	54,04	53,30	98,64	36,41	0,89
75	76,15	75,34	98,95	76,19	75,31	98,84	47,15	0,96
100	97,54	96,57	99,00	97,73	96,51	98,73	55,64	1,06
Euroefficiency		98,39 %						
No-load losses		422,83 V						
Standby loss		--						

Vdcnom = 630 V ±50 V Measure = 637,36 V								
% P _n	P _{aDC} (kW)	P _{aAC} (kW)	η _p (%)	P _{fDC} (kW)	P _{fAC} (kW)	η _c (%)	Ripple	THD
5	7.27	6.87	94.58	7.27	6.87	94.58	18,51	0,58
10	12.25	11.86	96.81	12.25	11.86	96.81	22,16	0,58
20	22.31	21.96	98.41	22.31	21.96	98.41	24,70	0,68
25	26.39	25.95	98.31	26.39	25.95	98.31	25,85	0,68
30	33.95	33.47	98.59	33.95	33.47	98.59	27,72	0,78
50	54.12	53.43	98.73	54.12	53.43	98.73	34,03	0,89
75	76.07	75.24	98.91	76.08	75.24	98.91	40,99	0,96
100	97.55	96.44	98.86	97.56	96.44	98.85	50,49	1,06
Euroefficiency		98,46 %						
No-load losses		422,83 V						
Standby loss		--						

Vd _{cmin} = 570 V ±50 V Measure = 578,80 V								
% P _n	P _{aDC} (kW)	P _{aAC} (kW)	η _p (%)	P _{fDC} (kW)	P _{fAC} (kW)	η _c (%)	Ripple	THD
5	7,50	7,13	95,16	7,50	7,13	95,14	17,32	0,58
10	11,69	11,33	96,93	11,69	11,33	96,91	19,33	0,58
20	21,73	21,39	98,45	21,74	21,39	98,42	22,22	0,68
25	27,27	26,87	98,52	27,30	26,87	98,29	24,05	0,68
30	34,40	34,09	99,12	34,50	34,09	98,63	25,95	0,78
50	54,43	53,88	98,99	54,56	53,88	98,68	32,15	0,89
75	76,08	75,32	99,01	76,13	75,32	98,93	42,83	0,96
100	97,54	96,51	98,95	97,63	96,51	98,85	48,05	1,06
Euroefficiency		98,46 %						
No-load losses		422,83 V						
Standby loss		--						