



Product Certificate Number	11251-29-CER-E7																																																						
Applicant	Ingeteam Power Technology S.A. - Energy Avenida Ciudad De La Innovación, 13. 31621. Sarriguren. Navarra. SPAIN																																																						
Series/	INGECON SUN Power B Series 1500 Vdc INGECON SUN STORAGE Power B Series 1500 Vdc																																																						
Model/	<table border="1"> <thead> <tr> <th data-bbox="608 640 1046 701"><u>INGECON SUN Power B Series 1500 Vdc</u></th><th data-bbox="1046 640 1505 701"><u>INGECON SUN STORAGE Power B Series 1500 Vdc</u></th></tr> </thead> <tbody> <tr><td>INGECON SUN 1170TL B450</td><td>INGECON SUN STORAGE1170TL B450</td></tr> <tr><td>INGECON SUN 1195TL B460</td><td>INGECON SUN STORAGE 1195TL B460</td></tr> <tr><td>INGECON SUN 1220TL B470</td><td>INGECON SUN STORAGE 1220TL B470</td></tr> <tr><td>INGECON SUN 1247TL B480</td><td>INGECON SUN STORAGE 1247TL B480</td></tr> <tr><td>INGECON SUN 1273TL B490</td><td>INGECON SUN STORAGE 1273TL B490</td></tr> <tr><td>INGECON SUN 1300TL B500</td><td>INGECON SUN STORAGE 1300TL B500</td></tr> <tr><td>INGECON SUN 1325TL B510</td><td>INGECON SUN STORAGE 1325TL B510</td></tr> <tr><td>INGECON SUN 1350TL B520</td><td>INGECON SUN STORAGE 1350TL B520</td></tr> <tr><td>INGECON SUN 1376TL B530</td><td>INGECON SUN STORAGE 1376TL B530</td></tr> <tr><td>INGECON SUN 1400TL B540</td><td>INGECON SUN STORAGE 1400TL B540</td></tr> <tr><td>INGECON SUN 1430TL B550</td><td>INGECON SUN STORAGE 1430TL B550</td></tr> <tr><td>INGECON SUN 1455TL B560</td><td>INGECON SUN STORAGE 1455TL B560</td></tr> <tr><td>INGECON SUN 1480TL B570</td><td>INGECON SUN STORAGE 1480TL B570</td></tr> <tr><td>INGECON SUN 1500TL B578</td><td>INGECON SUN STORAGE 1500TL B578</td></tr> <tr><td>INGECON SUN 1532TL B590</td><td>INGECON SUN STORAGE 1532TL B590</td></tr> <tr><td>INGECON SUN 1560TL B600</td><td>INGECON SUN STORAGE 1560TL B600</td></tr> <tr><td>INGECON SUN 1580TL B630</td><td>INGECON SUN STORAGE 1600TL B615</td></tr> <tr><td>INGECON SUN 1600TL B615</td><td>INGECON SUN STORAGE 1640TL B630</td></tr> <tr><td>INGECON SUN 1640TL B630</td><td>INGECON SUN STORAGE 1665TL B640</td></tr> <tr><td>INGECON SUN 1665TL B640</td><td>INGECON SUN STORAGE 1690TL B650</td></tr> <tr><td>INGECON SUN 1690TL B650</td><td>INGECON SUN STORAGE 1715TL B660</td></tr> <tr><td>INGECON SUN 1715TL B660</td><td>INGECON SUN STORAGE 1740TL B670</td></tr> <tr><td>INGECON SUN 1740TL B670</td><td>INGECON SUN STORAGE 1767TL B680</td></tr> <tr><td>INGECON SUN 1767TL B680</td><td>INGECON SUN STORAGE 1800TL B690</td></tr> <tr><td>INGECON SUN 1800TL B690</td><td>INGECON SUN STORAGE 1820TL B700</td></tr> <tr><td>INGECON SUN 1820TL B700</td><td>INGECON SUN STORAGE XXXXTL BYYY (***)</td></tr> </tbody> </table> (***) This reference indicates the equipment between 333 V and 700 V of AC voltage (YYY) and between 865 kW and 1820 kW of AC power at 30°C (XXXX).	<u>INGECON SUN Power B Series 1500 Vdc</u>	<u>INGECON SUN STORAGE Power B Series 1500 Vdc</u>	INGECON SUN 1170TL B450	INGECON SUN STORAGE1170TL B450	INGECON SUN 1195TL B460	INGECON SUN STORAGE 1195TL B460	INGECON SUN 1220TL B470	INGECON SUN STORAGE 1220TL B470	INGECON SUN 1247TL B480	INGECON SUN STORAGE 1247TL B480	INGECON SUN 1273TL B490	INGECON SUN STORAGE 1273TL B490	INGECON SUN 1300TL B500	INGECON SUN STORAGE 1300TL B500	INGECON SUN 1325TL B510	INGECON SUN STORAGE 1325TL B510	INGECON SUN 1350TL B520	INGECON SUN STORAGE 1350TL B520	INGECON SUN 1376TL B530	INGECON SUN STORAGE 1376TL B530	INGECON SUN 1400TL B540	INGECON SUN STORAGE 1400TL B540	INGECON SUN 1430TL B550	INGECON SUN STORAGE 1430TL B550	INGECON SUN 1455TL B560	INGECON SUN STORAGE 1455TL B560	INGECON SUN 1480TL B570	INGECON SUN STORAGE 1480TL B570	INGECON SUN 1500TL B578	INGECON SUN STORAGE 1500TL B578	INGECON SUN 1532TL B590	INGECON SUN STORAGE 1532TL B590	INGECON SUN 1560TL B600	INGECON SUN STORAGE 1560TL B600	INGECON SUN 1580TL B630	INGECON SUN STORAGE 1600TL B615	INGECON SUN 1600TL B615	INGECON SUN STORAGE 1640TL B630	INGECON SUN 1640TL B630	INGECON SUN STORAGE 1665TL B640	INGECON SUN 1665TL B640	INGECON SUN STORAGE 1690TL B650	INGECON SUN 1690TL B650	INGECON SUN STORAGE 1715TL B660	INGECON SUN 1715TL B660	INGECON SUN STORAGE 1740TL B670	INGECON SUN 1740TL B670	INGECON SUN STORAGE 1767TL B680	INGECON SUN 1767TL B680	INGECON SUN STORAGE 1800TL B690	INGECON SUN 1800TL B690	INGECON SUN STORAGE 1820TL B700	INGECON SUN 1820TL B700	INGECON SUN STORAGE XXXXTL BYYY (***)
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Type of generating unit	Photovoltaic Inverter																																																						
Technical Data	See pages 3 and 4																																																						
Network connection rule	IEC 61000-6-2: 2005. EMC -- Part 6-2: Generic standards - Immunity for industrial environments. IEC 61000-6-4: 2006. EMC -- Part 6-4: Generic standards - Emission standard for industrial environments. IEC 61000-6-1: 2005. EMC -- Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments.																																																						

Having assessed the test report number: 49882REM.001 performed by AT4 Wireless based on the requirements of the EN ISO/IEC 17025:2005

The above-mentioned generating unit complies with the requirements of the: **IEC 61000-6-2: 2005**. EMC -- Part 6-2: Generic standards - Immunity for industrial environments, **IEC 61000-6-4: 2006**. EMC -- Part 6-4: Generic standards - Emission standard for industrial environments and **IEC 61000-6-1: 2005**. EMC -- Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments.

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 11251-29-E6-CER issued on May 30, 2019

Madrid, November 08, 2019. This certificate is valid until November 08, 2022.

Miguel Martínez Lavín
Certification Manager

INGECON SUN Power B Series 1500 Vdc

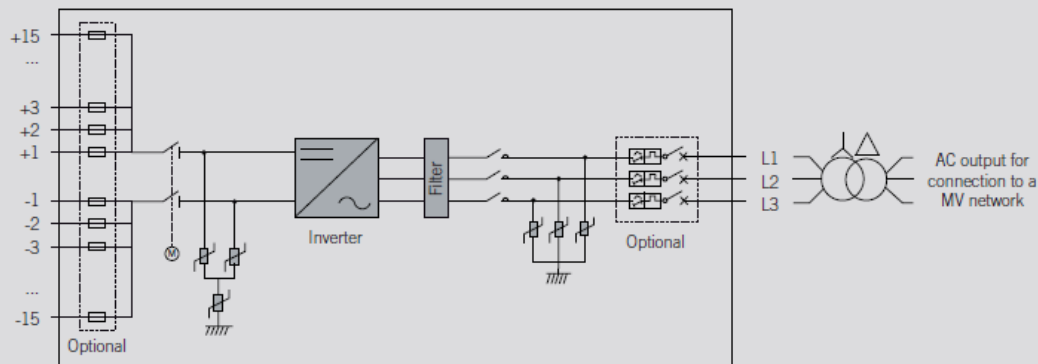
PV inverters with AC voltage ranging from 333 V to 700 V	
Input (DC)	
Recommended PV array power range	Pdc.min=1,1*Pac (50°C) Pac.max= 1,3*Pac (30 °C)
Voltage MPP min	$V_{mpp.min} = \frac{1,732 \sqrt{\frac{2}{3} V^2 + (0,04 * I_{max})^2}}{0,985}$
Voltage MPP max	1300 V
Maximum Voltage	1500 V
Maximum Current	1850 A
Output (AC)	
Power @30°C/@50°C	Pac = ($\sqrt{3}$) * Vac * Iac
Current @30°C/@50°C	1500 A/1350 A
Rated Voltage	Vac = 333 V ... 700 V
Frequency	50/60 Hz
Software version	ABK1000_B

INGECON SUN STORAGE Power B series 1500 Vdc

PV inverters with AC voltage ranging from 333 V to 700 V	
Input (DC)	
Min battery Voltage	$V_{mpp.min} = \frac{1,732 \sqrt{\frac{2}{3} (1,1V)^2 + (0,04 * I_{max})^2}}{0,985}$
Max. Battery voltage	1300 V
Maximum Current	1850 A
Output (AC)	
Power @30°C/@50°C	Pac = ($\sqrt{3}$) * Vac * Iac
Current @30°C/@50°C	1500 A/1350 A
Rated Voltage	Vac = 333 V ... 700 V
Frequency	50/60 Hz
Software version	ABK1000_B

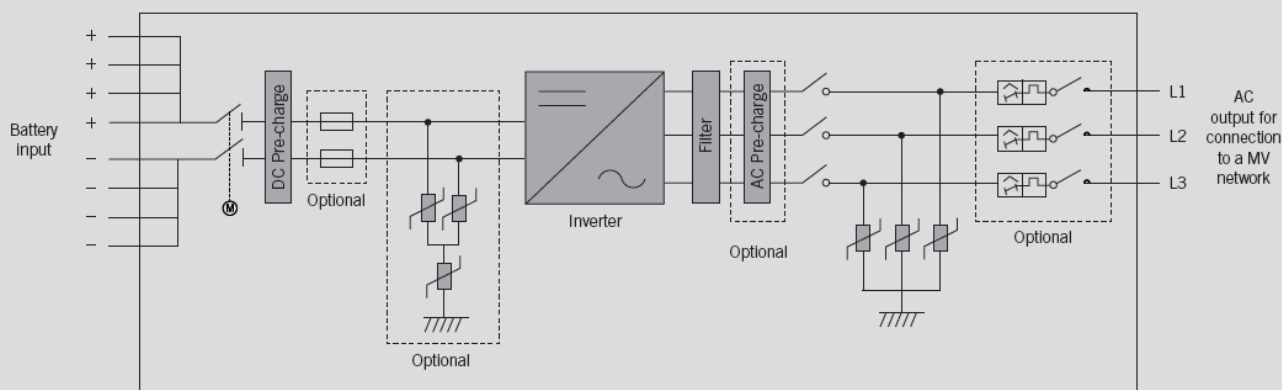
Electrical Diagram of INGECON SUN Power B series 1500 Vdc:

PowerMax B Series



Electrical Diagram of INGECON SUN STORAGE Power B series 1500 Vdc:

SUN STORAGE PowerMax



Manufacturer:	Ingeteam Power Technology S.A. - Paneles Pol. Ind. El Juncarillo, Nave 1 31293 Sesma (Navarra) – SPAIN
The sample selected to test was representative of the production. The sample was selected in manufacture facilities.	May 31, 2016
Sample Report Number:	11251-1-TM
The inspection of manufacturing process was performed in manufacture facilities:	June 19, 2019
Inspection Report Number:	10978-19-1-IF