

## MEDIUM VOLTAGE STATION FOR DECENTRALIZED PV SYSTEMS WITH 1500 V STRING INVERTERS

### MV solution up to 7 MVA

MV station designed to connect Ingeteam's three-phase string inverters to a medium voltage grid.

#### String inverter optimization

The StringStation has been conceived to enable and optimize the use of Ingeteam's INGECON® SUN 330/350TL M12 inverters at utility scale, ensuring a perfect connection between the PV power plant and the grid. This turnkey solution is capable of connecting up to 7 MW of 1500 V 3Play inverters to a medium voltage grid.

#### Available worldwide

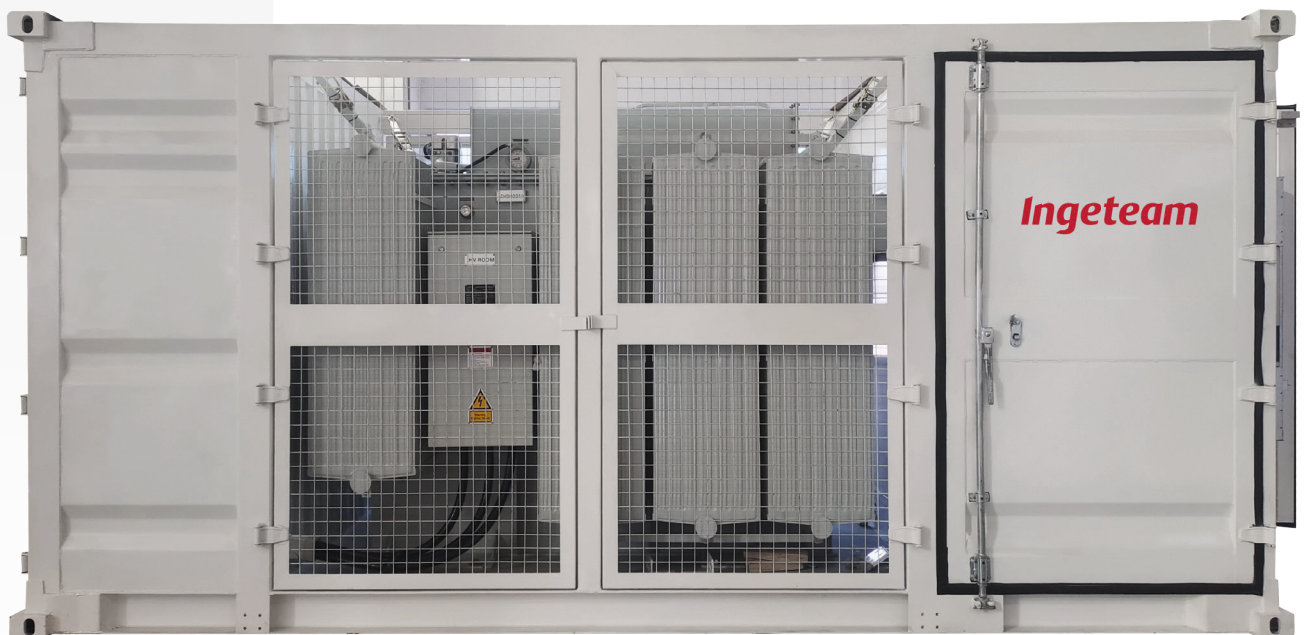
The INGECON® SUN StringStation can be marketed and installed everywhere in the world, as it is supplied totally integrated and it is easily transportable as a Plug & Play solution.

#### Equipped with everything necessary

It is supplied with the low-voltage string inverter protections, auxiliary services, step-up transformer and medium-voltage switchgear. Available with high-speed Ethernet or Wi-Fi to communicate with the PV inverters.

#### Maximum cost-effectiveness

The INGECON® SUN StringStation is a standard solution designed to maximize the compactness and cost-effectiveness of the overall equipment. All the elements are prepared to withstand adverse weather conditions. Moreover, they are supplied pre-connected and pre-integrated into a skid in order to guarantee a Plug & Play installation.



MAIN FEATURES

- Output power up to 7 MW at 37 °C.
- Compatible with INGECON® SUN 330/350TL M12
- Available up to 34.5 kV output voltage.
- Plug & Play solution.
- Maximum reliability, higher safety.
- Reduced maintenance.
- Relative humidity (non-condensing): 0-100%.
- Max. installation altitude: 4,500 meters above sea level.

STANDARD MV EQUIPMENT

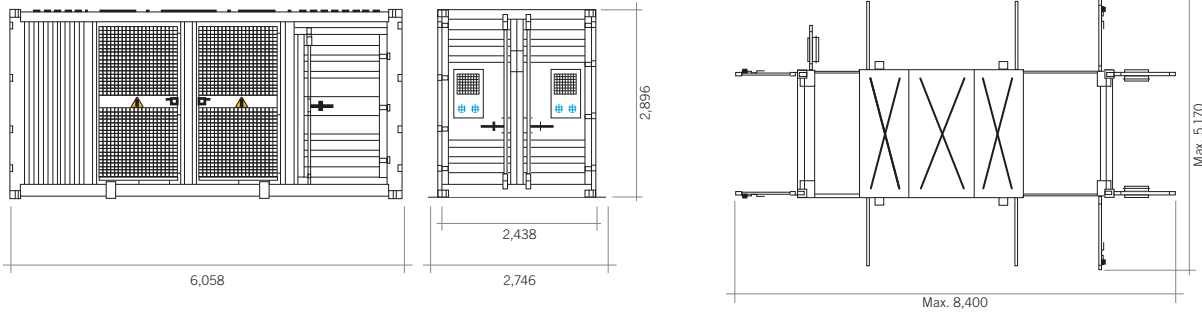
- Step-up transformer with reduced power losses.
- 2L1A MV switchgear.
- Transformer protection relay.
- MV protection with circuit breaker.
- Self-power auxiliary services panel.

OPTIONAL ACCESORIES

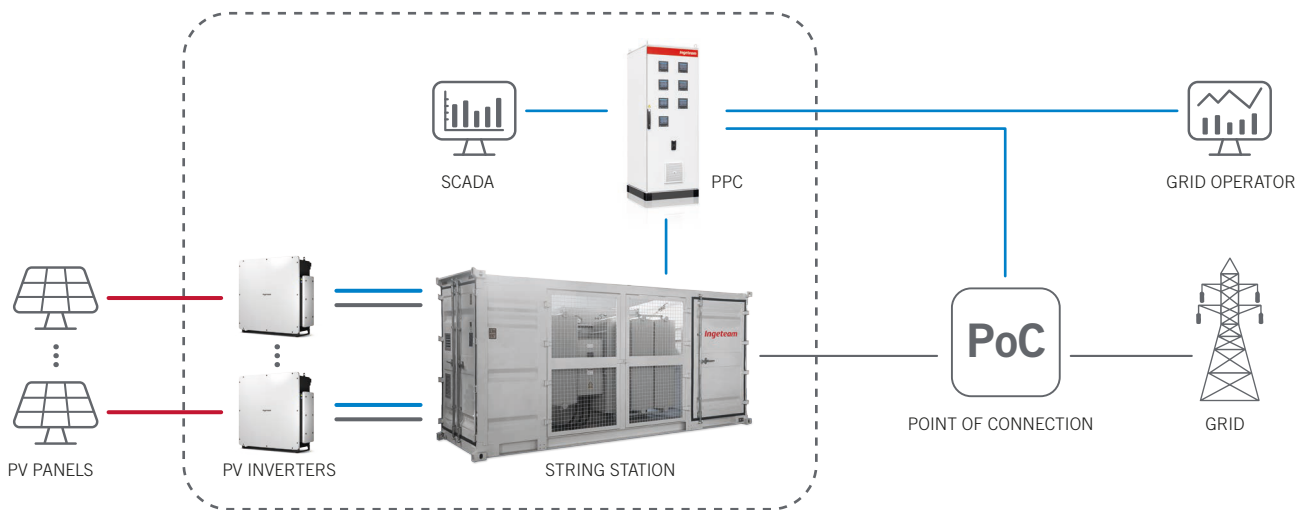
- 1L1A MV switchgear.



COMPONENTS



PV PLANT CONFIGURATION

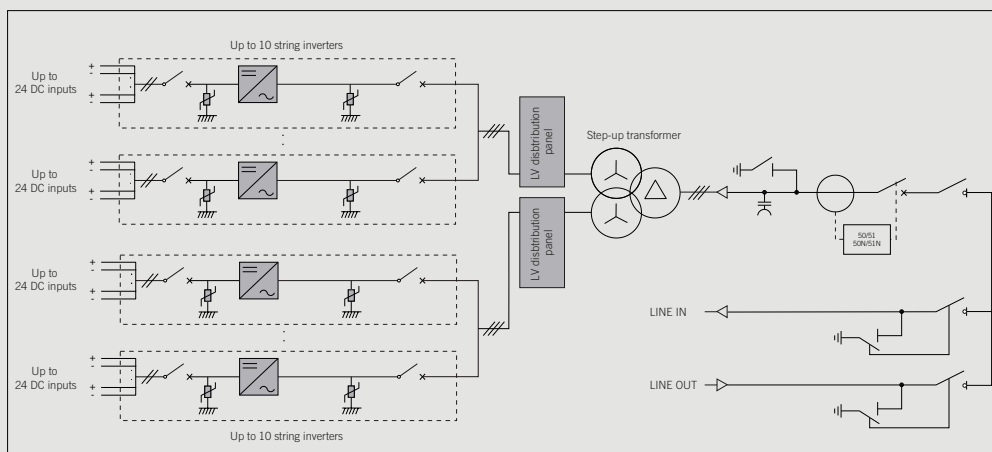


INGETEAM SCOPE OF SUPPLY

- Communication
- DC Power
- AC Power

	SST 4620 CON20	SST 4900 CON20	SST 6600 CON20	SST 7000 CON20
<b>AC Combiner Box</b>				
Rated power at 37 °C	4,620 kVA	4,900 kVA	6,600 kVA	6,928 kVA
Number of inverters	14	14	20	20
Inverter model	INGECON® SUN 330TL M12	INGECON® SUN 350TL M12	INGECON® SUN 330TL M12	INGECON® SUN 350TL M12
AC current at 37 °C	3,332 A	3,500 A	4,760 A	5,000 A
AC voltage	3 / PE, 800 V			
Frequency	50 / 60 Hz			
Overcurrent protection	Main circuit breaker			
AC max. cross section	400 mm <sup>2</sup>			
Cooling system	Forced air ventilation			
Protection degree	IP54			
<b>Step-up Transformer</b>				
Medium voltage	36 kV class, 50 / 60 Hz			
Cooling system	ONAN			
Minimum PEI (Peak Efficiency Index) <sup>(1)</sup>	99%			
Installation	Readiness for outdoor installation			
<b>MV Switchgear</b>				
Medium voltage	24 kV / 36 kV			
Rated current	630 A			
Cooling system	Natural air ventilation			
Protection degree	IP54			
<b>General data</b>				
Operating temperature range	from -20 °C to +50 °C			
Relative humidity (non-condensing)	0 - 100 %			
Maximum altitude	4,500 masl (power derating starting at 1,000 masl)			
<b>Equipment</b>				
Auxiliary services panel	IP54 self-powered LV panel			
Step-up Transformer	Oil-immersed hermetically sealed transformer			
MV Switchgear	2L1A RMU as standard (1L1A optional)			
<b>Mechanical information</b>				
Structure type	20 ft container			
Body dimensions w/ doors closed (W x D x H)	6,058 x 2,438 x 2,896 mm			
Body dimensions w/ doors open (W x D x H)	8,400 x 5,170 x 2,896 mm			
Weight	< 27 t			
Standards	IEC 62271-202, IEC 62271-200, IEC 60076			

**Note:** <sup>(1)</sup> For European installations, ECO design according to the EU 548/2014 and EU 2019/1783 standards.





# Ingeteam

**Ingeteam Power Technology, S.A.**  
Avda. Ciudad de la Innovación, 13  
31621 Sarriguren (Navarra) - Spain  
Tel.: +34 948 288 000  
Fax: +34 948 288 001  
e-mail: solar.energy@ingeteam.com

**Ingeteam S.r.l.**  
Via Emilia Ponente, 232  
48014 Castel Bolognese (RA) - Italy  
Tel.: +39 0546 651 490  
Fax: +39 054 665 5391  
e-mail: italia.energy@ingeteam.com

**Ingeteam SAS**  
La Naurouze B - 140 rue Carmin  
31670 Labège - France  
Tel.: +33 (0)5 61 25 00 00  
Fax: +33 (0)5 61 25 00 11  
e-mail: france@ingeteam.com

**Ingeteam INC.**  
3550 W. Canal St.  
Milwaukee, WI 53208 - USA  
Tel.: +1 (414) 934 4100 / +1 (855) 821 7190  
Fax: +1 (414) 342 0736  
e-mail: solar.us@ingeteam.com

**Ingeteam, a.s.**  
Technologická 371/1  
70800 Ostrava - Pustkovec  
Czech Republic  
Tel.: +420 59 747 6800  
Fax: +420 59 732 6899  
e-mail: czech@ingeteam.com

**Ingeteam Shanghai, Co. Ltd.**  
Shanghai Trade Square, 1105  
188 Si Ping Road  
200086 Shanghai - P.R. China  
Tel.: +86 21 65 07 76 36  
Fax: +86 21 65 07 76 38  
e-mail: shanghai@ingeteam.com

**Ingeteam, S.A. de C.V.**  
Leibnitz Ext 13 Int 1102, Colonia Anzures  
11590 - Miguel Hidalgo  
Ciudad de México - Mexico  
Tel.: +52 81 8311 4858  
Fax: +52 81 8311 4859  
e-mail: northamerica@ingeteam.com

**Ingeteam Ltda.**  
Rua Estácio de Sá, 560  
Jd. Santa Genebra  
13080-010 Campinas/SP - Brazil  
Tel.: +55 19 3037 3773  
e-mail: brazil@ingeteam.com

**Ingeteam Pty Ltd.**  
Unit 2 Alphen Square South  
16th Road, Randjiespark  
Midrand 1682 - South Africa  
Tel.: +2711 314 3190  
Fax: +2711 314 2420  
e-mail: southafrica@ingeteam.com

**Ingeteam SpA**  
Los militares 5890, Torre A, oficina 401  
7560742 - Las Condes  
Santiago de Chile - Chile  
Tel.: +56 2 29574531  
e-mail: chile@ingeteam.com

**Ingeteam Power Technology India Pvt. Ltd.**  
2nd Floor, 431  
Udyog Vihar, Phase III  
122016 Gurgaon (Haryana) - India  
Tel.: +91 124 420 6491-5  
Fax: +91 124 420 6493  
e-mail: india@ingeteam.com

**Ingeteam Sp. z o.o.**  
Ul. Koszykowa 60/62 m 39  
00-673 Warszawa - Poland  
Tel.: +48 22 821 9930  
Fax: +48 22 821 9931  
e-mail: polska@ingeteam.com

**Ingeteam Australia Pty Ltd.**  
iAccelerate Centre, Building 239  
Innovation Campus, Squires Way  
North Wollongong, NSW 2500 - Australia  
Tel.: +61 429 111 190  
e-mail: australia@ingeteam.com

**Ingeteam Panama S.A.**  
Av. Manuel Espinosa Batista,  
Ed. Torre Internacional  
Business Center, Apto./Local 407  
Urb.C45 Bella Vista  
Bella Vista - Panama  
Tel.: +50 761 329 467

**Ingeteam Service S.R.L.**  
Bucuresti, Sector 2,  
Bulevardul Dimitrie Pompeiu Nr 5-7  
Cladirea Hermes Business  
Campus 1, Birou 236, Etaj 2  
Romania  
Tel.: +40 728 993 202

**Ingeteam Philippines Inc.**  
Office 2, Unit 330, Milelong Bldg.  
Amorsolo St. corner Rufino St.  
1230 Makati  
Gran Manila - Philippines  
Tel.: +63 0917 677 6039

**Ingeteam Power Technology, S.A.**  
Level 1, Al Bateen Tower C6 Bainunah  
ADIB Building, Street 34  
PO BOX 30010 - Abu Dhabi  
United Arab Emirates  
Tel.: +971 50 125 8244

**Ingeteam Vietnam Ltd.**  
Spaces - 28A Tran Hung Dao Street  
Phan Chu Trinh Ward  
Hoan Kiem District  
Ha Noi City - Vietnam  
Tel.: +84 24 71014057  
e-mail: vietnam@ingeteam.com

**Ingeteam Uruguay, S.A.**  
Avenida 18 de Julio, 1474, Piso 10  
11200, Montevideo - Uruguay  
Tel.: +598 934 92064