

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

MV solution up to 6 MVA - CEI 0-16 compliant

MV station designed to connect Ingeteam's three-phase string inverters to a medium volt-age 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 6 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

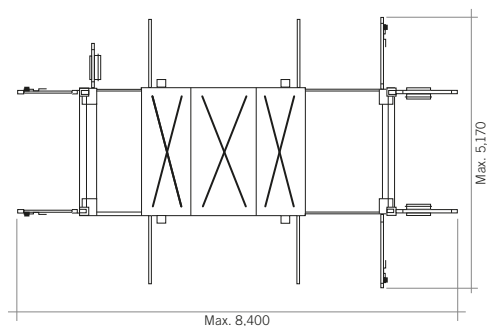
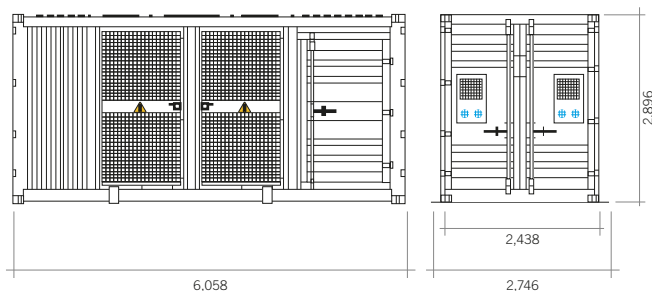
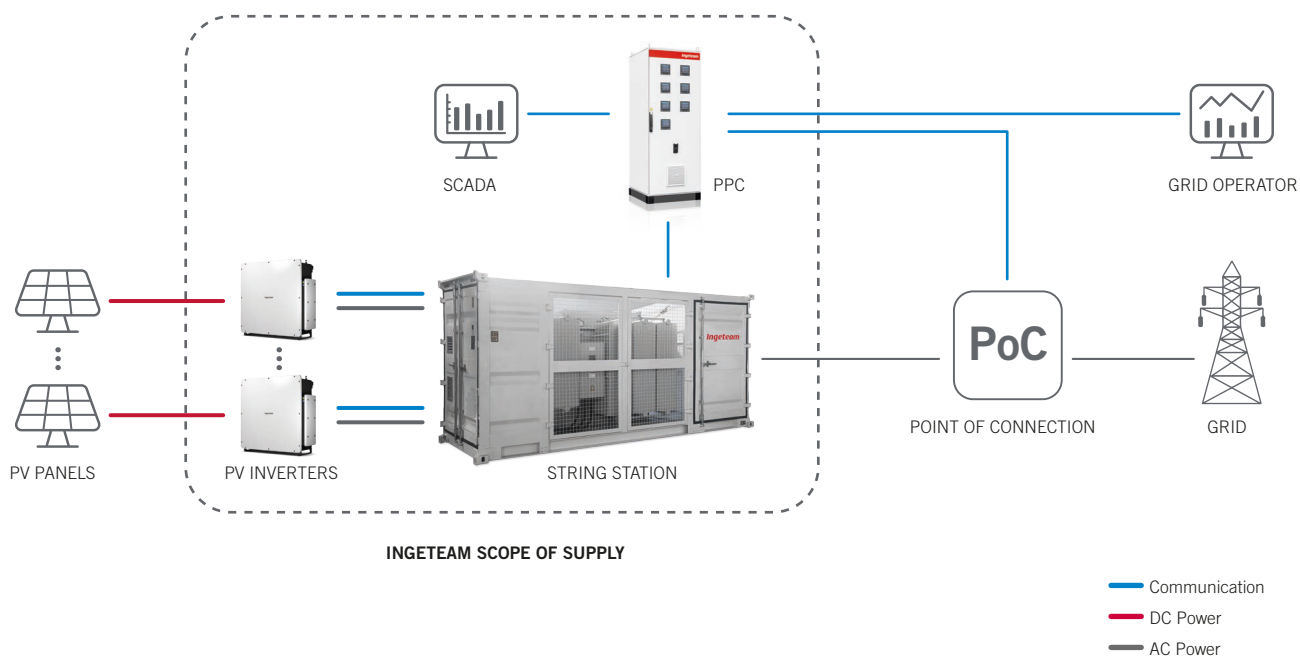
- Output power up to 6 MW at 40 °C.
- Compatible with INGECON® SUN 330/350TL M12
- Available up to 20 kV output voltage.
- Plug & Play solution.
- Maximum reliability, higher safety.
- Reduced maintenance.
- Relative humidity (non-condensing): 0-100%.
- Max. installation altitude: 4,500 meters above 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.

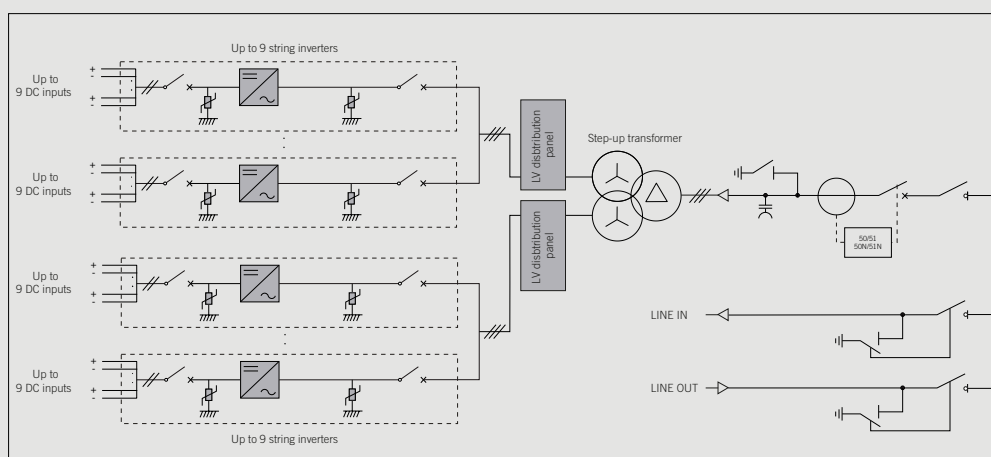
COMPONENTS
OPTIONAL ACCESSORIES

- 1L1A MV switchgear.


PV PLANT CONFIGURATION


	SST 2400 CON20	SST 4800 CON20	SST 3000 CON20	SST 6000 CON20
AC Combiner Box				
Rated power at 40 °C	2,400 kVA	4,800 kVA	3,000 kVA	6,000 kVA
Number of inverters	7	14	9	18
Inverter model	INGECON® SUN 330-350TL M12	INGECON® SUN 330-350TL M12	INGECON® SUN 330-350TL M12	INGECON® SUN 330-350TL M12
AC current at 40 °C	1,732 A	3,464 A	2,165 A	4,330 A
AC voltage	3 / PE, 800 V			
Frequency	50 / 60 Hz			
Overcurrent protection	Main circuit breaker			
AC max. cross section	400 mm²			
Cooling system	Forced air ventilation			
Protection degree	IP54			
Step-up Transformer				
Medium voltage	15 or 20 kV, 50 / 60 Hz			20 kV, 50 / 60 Hz
Cooling system	ONAN			
Minimum PEI (Peak Efficiency Index) ⁽¹⁾	99%			
Installation	Readiness for outdoor installation			
MV Switchgear				
Medium voltage	24 kV SF6 free			
Rated current	630 A			
Cooling system	Natural air ventilation			
Protection degree	IP54			
General data				
Operating temperature range	from -25 °C to +55 °C			
Relative humidity (non-condensing)	0 - 100 %			
Maximum altitude	4,500 masl (power derating starting at 1,000 masl)			
Equipment				
Auxiliary services panel	IP54 self-powered LV panel			
Step-up Transformer	Oil-immersed hermetically sealed transformer			
MV Switchgear	2L1A RMU as standard (1L1A optional)			
Mechanical information				
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	< 25 t			
Standards	IEC 62271-202, IEC 62271-200, IEC 60076			

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



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