

MV SOLUTION UP TO 8.4 MVA. A MEDIUM VOLTAGE STATION FOR VIRTUAL CENTRALIZED BES SYSTEMS WITH 1,500 V STRING INVERTERS

MV station designed to connect and hold Ingeteam's three-phase string inverters working as an interface with the grid.

String inverter optimization

The StringStation has been conceived to enable and optimize the use of Ingeteam's INGECON® SUN STORAGE 350TL inverters, ensuring a perfect connection between the BESS plant and the grid. This turnkey solution is capable of connecting up to 8.4 MW of 1,500 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, LV / MV transformer and medium-voltage switchgear.

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 preintegrated into a skid in order to guarantee a Plug & Play installation.

A medium voltage string station for virtual centralized BES systems which allows flexibility and scalability

Main features

- Output power up to 8.4 MW.
- Compatible with INGECON® SUN STORAGE 350TL inverters.
- Available up to 33 kV output voltage.
- Available with outdoor-mounted hermetically-sealed LV / MV transformer.
- IP54 MV Switchgear.
- Plug & Play solution.

AC Combiner Box

- Scalable system thanks to its modular design.
- Circuit breaker protection per each AC Combiner Box.
- 1500 V DC fuses.
- Forced air ventilation.

Standard MV equipment

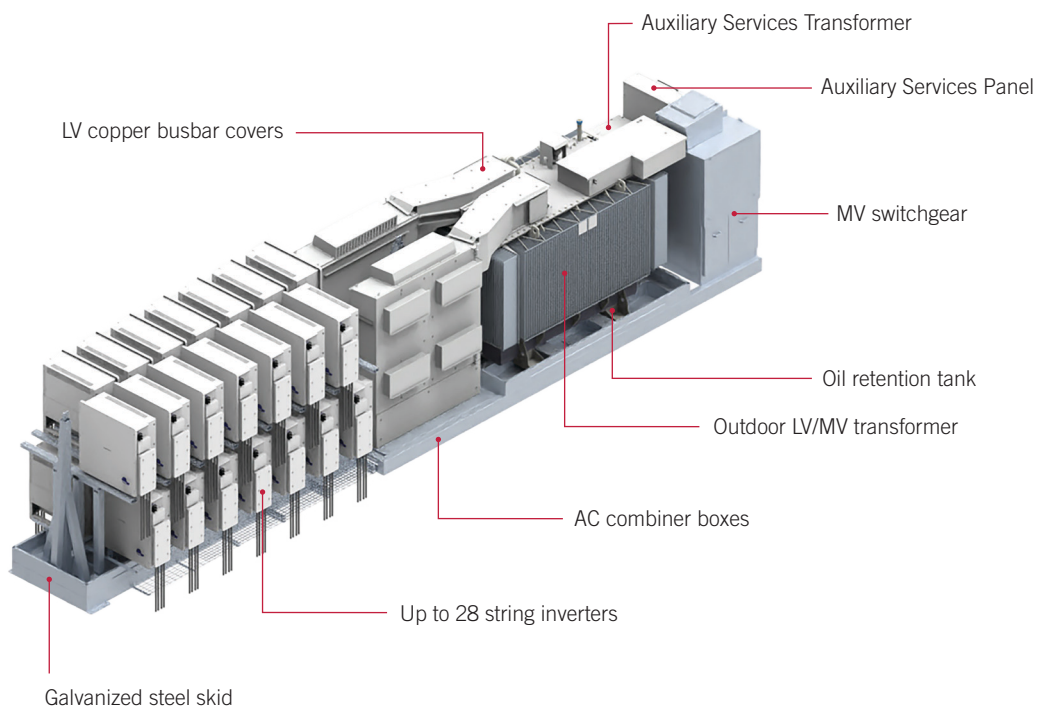
- LV / MV transformer with reduced power losses.
- LC MV switchgear.
- DGPT2 relay included in the transformer.
- MV protection with circuit breaker.
- Oil deposit integrated in the skid.
- Filtering kit in the oil deposit.

Benefits

- Maximum reliability, higher safety.
- Reduced maintenance.
- Flexibility and scalability.
- Greater power density.



AC quick connectors.



VCST 8400

AC COMBINER BOX

Rated power at 40 °C	8,400 kW
Number of inverters	28
AC current at 40 °C	7,000 A
AC voltage	690 V
Frequency	50 / 60 Hz
Overcurrent protection	Circuit breaker
Cooling system	Forced air ventilation
Protection degree	IP54
Maximum aux. consumption	2.3 kW

LV / MV TRANSFORMER

Type	Oil-immersed hermetically sealed transformer
Medium voltage	Up to 33 kV
Cooling system	ONAN
Max. efficiency	99%
Protection degree	IP54

MV SWITCHGEAR

Type	RLC (bus riser, line incoming with disconnecting switch, transformer protection)
Medium voltage	Up to 33 kV (class 36 kV)
Rated current	630 A
Protection degree	IP54

GENERAL DATA

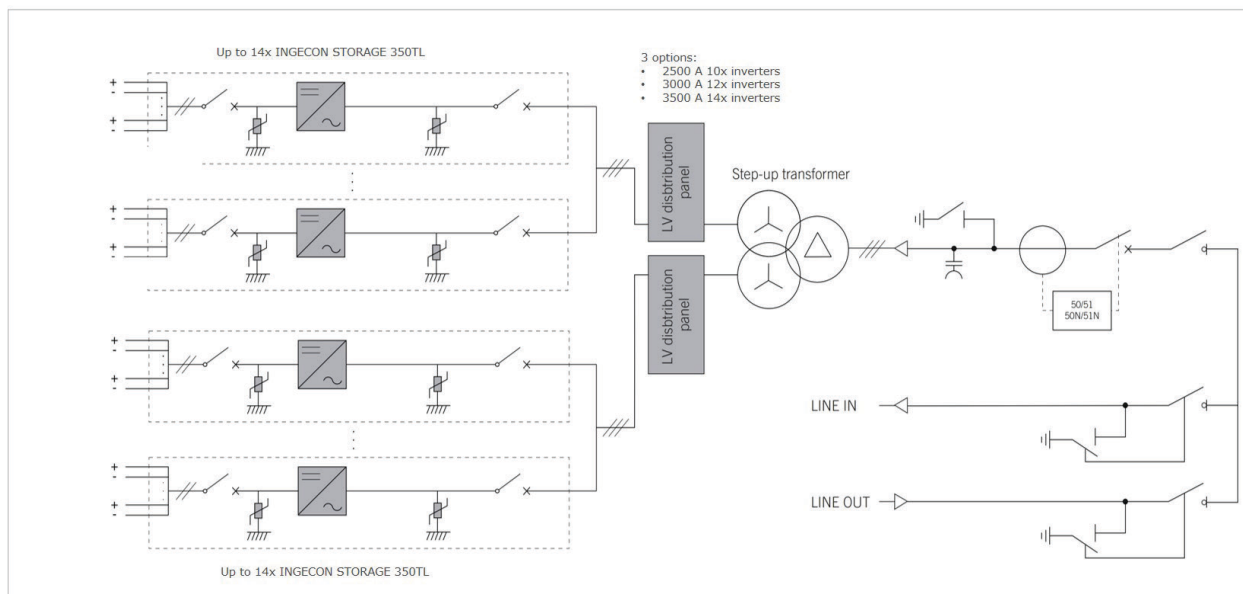
Operating temperature range	From -20°C to +50°C
Relative humidity (non-condensing)	0-100%
Maximum altitude	4,000 masl (for instalations beyond 1,000 masl, please contact Ingeteam's Sales Department)

EQUIPMENT

Inverter version	INGECON® SUN STORAGE 350TL
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MECHANICAL INFORMATION

Structure type	Hot dip galvanized skid
Body dimensions	11,700 x 2,100 x 2,600 mm
Weight	28 ton
Standards	IEC 62271-212, IEC 62271-200, IEC 60076, IEC 61439-1



Specifications included in this datasheet could change without notice. Please contact Ingeteam's sales department in case of any queries.

INGECON SUN STORAGE VCST 8400_EN_Rv_A3