

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

### MV solution up to 8.4 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 8.4 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 8.4 MW at 40 °C.
- Compatible with INGECON® SUN 330TL/350TL M12
- Available up to 36 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.

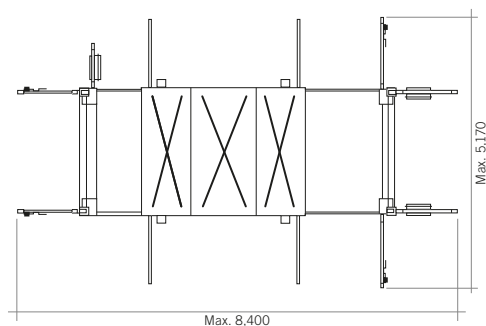
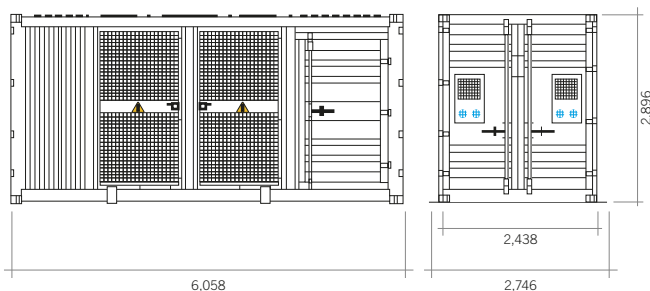
STANDARD MV EQUIPMENT

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

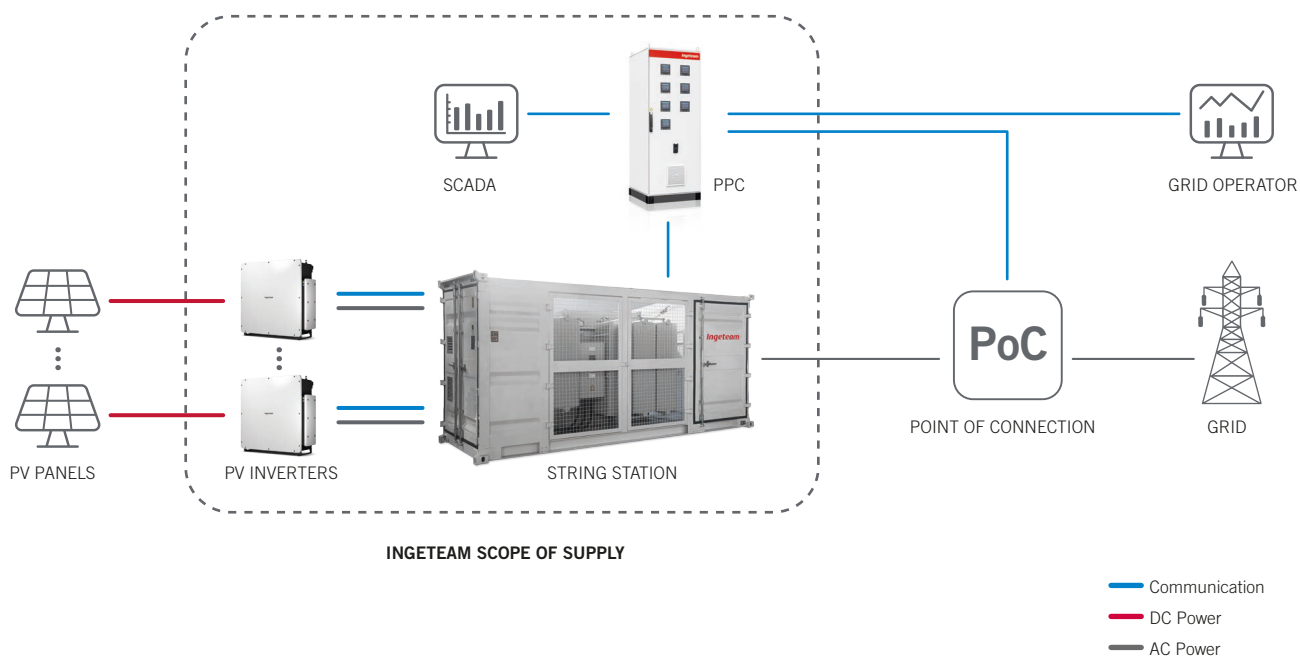
COMPONENTS

OPTIONAL ACCESSORIES

- 1L1A MV switchgear.

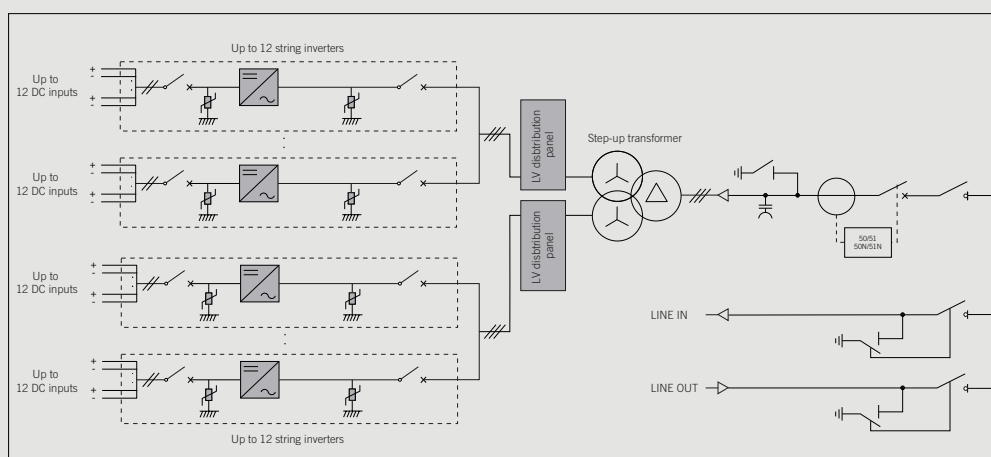


PV PLANT CONFIGURATION



|                                                    | SST 4900 CON20                                     | SST 7000 CON20               | SST 8400 CON20               |
|----------------------------------------------------|----------------------------------------------------|------------------------------|------------------------------|
| AC Combiner Box                                    |                                                    |                              |                              |
| Rated power at 40 °C                               | 4,900 kVA                                          | 7,000 kVA                    | 8,400 kVA                    |
| Number of inverters                                | 14                                                 | 20                           | 24                           |
| Inverter model                                     | INGECON® SUN 330TL-350TL M12                       | INGECON® SUN 330TL-350TL M12 | INGECON® SUN 330TL-350TL M12 |
| AC current at 40 °C                                | 3,500 A                                            | 5,000 A                      | 6,000 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                                     | Up to 36 kV, 50 / 60 Hz                            |                              |                              |
| Cooling system                                     | ONAN                                               |                              |                              |
| Minimum PEI (Peak Efficiency Index) <sup>(1)</sup> | 99%                                                |                              |                              |
| Installation                                       | Readiness for outdoor installation                 |                              |                              |
| MV Switchgear                                      |                                                    |                              |                              |
| Medium voltage                                     | 36 kV / 40.5 kV                                    |                              |                              |
| 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                                             | < 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.



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