

**MEDIUM VOLTAGE  
POWER STATION  
CUSTOMIZED UP  
TO 7.65 MVA, WITH  
ALL THE UL-LISTED  
COMPONENTS  
SUPPLIED ON TOP  
OF THE SAME  
SKID PLATFORM**

## From 2500 up to 7650 kVA

This medium-voltage solution integrates all the necessary elements to develop a large-scale solar PV plant.

### **Maximize your investment with a minimal effort**

Ingeteam's FSK power station is a compact, customizable and flexible solution that can be configured to suit each customer's requirements. It is supplied together with up to two photovoltaic inverters. All the equipment is suitable for outdoor installation, so there is no need of any kind of housing.

### **Higher adaptability and power density**

This power station is now more versatile, as it presents the MV transformer integrated into a steel platform together with the LV and MV components, including the PV inverters. Moreover, it features one of the market's greatest power densities.

### **Plug & Play technology**

This MV solution integrates power conversion equipment (up to 7.65 MVA), liquid-filled hermetically sealed transformer 36 kV class and

provision for low voltage equipment. The MV Skid is delivered pre-assembled for a fast on-site connection with up to two PV inverters from Ingeteam's INGECON® SUN 3Power C Series inverter family.

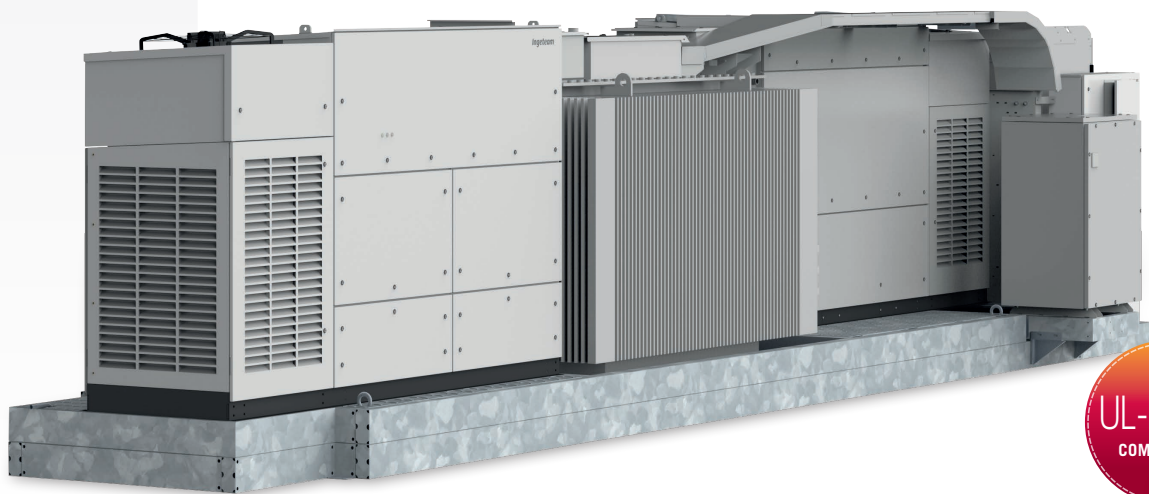
### **Complete accessibility**

Thanks to the lack of housing, the inverters, the switchgear and the transformer can have immediate access. Furthermore, the design of the 3Power C Series central inverters has been conceived to facilitate maintenance and repair works.

### **Maximum protection**

Ingeteam's 3Power C Series central inverters feature an NEMA 3 protection class for their power stacks thanks to a combined water and air cooling system that optimises the operating temperature of the power electronics.

Apart from that, they feature the main electrical protections and they deploy grid support functionalities, such as low voltage ride-through capability, reactive power deliverance and active power injection control.



**CONSTRUCTION**

- Steel base frame.
- Suitable for slab or piers mounting.
- Compact design, minimising freight costs.
- Minimum installation at project site.

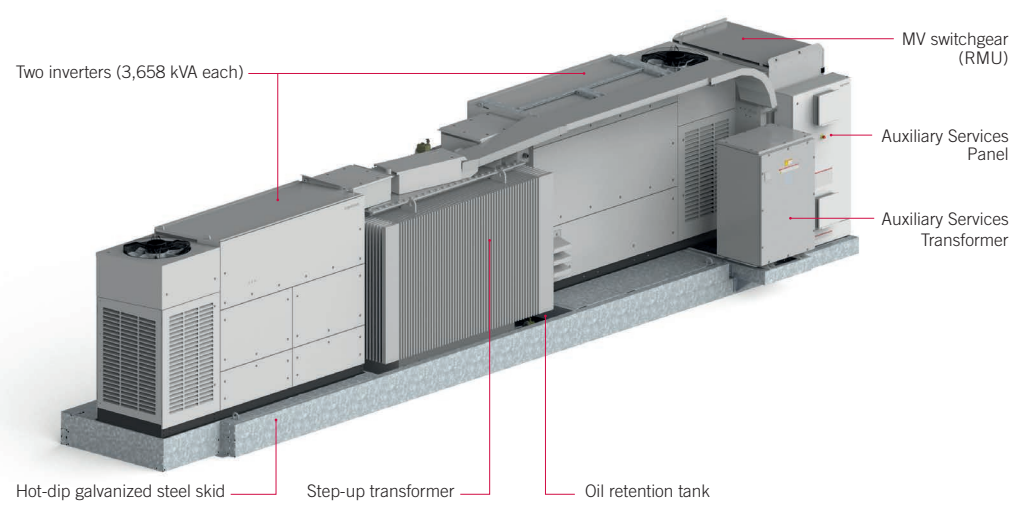
**OPTIONAL ACCESSORIES**

- Auxiliary services transformer (up to 60 kVA, Dyn11).
- MV Surge arresters.
- Self-power auxiliary services panel.
- High-speed Ethernet / fibre optic communication switch.
- INGECON® SUN StringBox with 16 / 24 / 32 input channels. Intelligent or passive string combiner box.
- Energy meter for energy production.
- Reactive power regulation when there is no PV power available.
- Ground connection of the PV array.

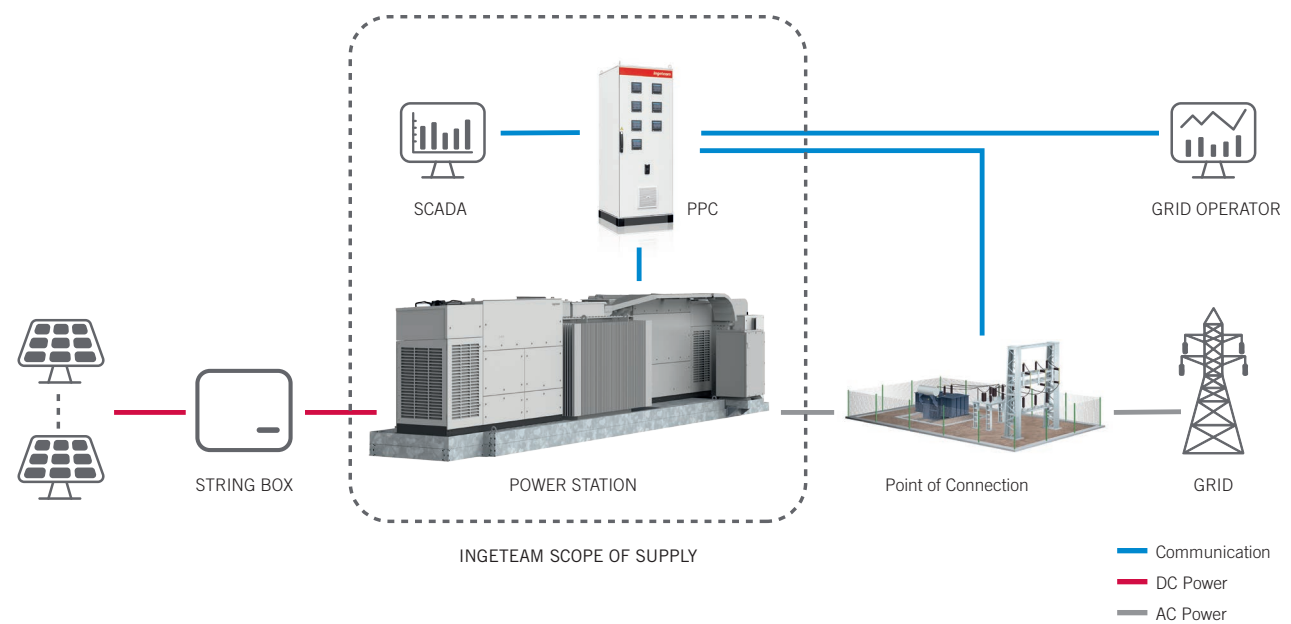
**STANDARD EQUIPMENT**

- Up to two inverters with an output power of 7.65 MVA.
- Liquid-filled hermetically-sealed transformer.
- 2L1A MV switchgear.
- Oil-retention tank.
- Metal frame for installation of LV equipment.

**COMPONENTS**



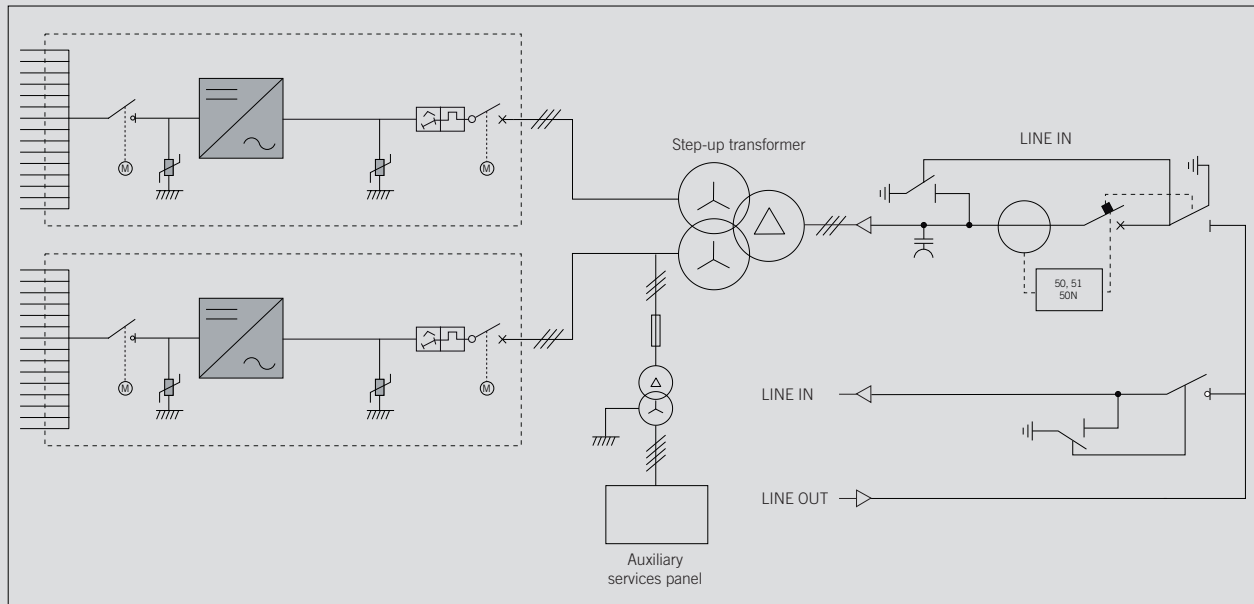
**PLANT CONFIGURATION**



|   | 3825 FSK U C Series                                 | 7650 FSK U C Series       |
|---|---|---------------------------|
| <b>General information</b>                |   |                           |
| Number of inverters                       | 1   | 2                         |
| Max. power. @35 °C / 95 °F <sup>(1)</sup> | 3,658 kVA   | 7,316 kVA                 |
| Operating temperature range               | from -5 °C to +50 °C                                |                           |
| Relative humidity (non condensing)        | 0 - 100%  |                           |
| Maximum altitude                          | 4,500 masl (power derating starting at 1,000 masl)  |                           |
| <b>Step-up Transformer</b>                |   |                           |
| Medium voltage                            | 36 kV class, 50 / 60 Hz                             |                           |
| Cooling system                            | ONAN (KNAN optionally)                              |                           |
| Minimum PEI (Peak Efficiency Index)       | 99.50%  |                           |
| Installation                              | Readiness for outdoor installation                  |                           |
| <b>MV Switchgear (RMU)</b>                |   |                           |
| Medium voltage                            | 24 kV / 36 kV                                       |                           |
| Rated current                             | 630 A   |                           |
| Cooling system                            | Natural air ventilation                             |                           |
| Protection degree                         | IP54  |                           |
| <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 (0L1A1L, 1L1A & 0L1A optional) |                           |
| <b>Mechanical information</b>             |   |                           |
| Structure type                            | Hot dip galvanized steel skid                       |                           |
| Dimensions Full Skid (W x D x H)          | 9,500 x 2,600 x 2,620 mm                            | 11,390 x 2,600 x 2,620 mm |
| Full Skid                                 | 16 T  | 25 T                      |
| Standards                                 | IEC 62271-202, IEC 62271-200, IEC 60076             |                           |

**Notes:** <sup>(1)</sup> Maximum power calculated with the inverter model INGECON® SUN 3825TL C660. For other inverter models, please contact Ingeteam's Solar sales department.

**Configuration with two C Series solar inverters**



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