

**MEDIUM VOLTAGE  
INVERTER STATION,  
CUSTOMIZED  
UP TO 5.1 MVA,  
WITH ALL THE  
COMPONENTS  
SUPPLIED ON TOP  
OF A FULL SKID**

## From 830 kVA to 5.1 MVA

This brand new medium voltage solution integrates all the devices required for a multi-mega-watt system.

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

Ingeteam's Inverter 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 four photovoltaic inverters (two dual 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 PowerStation is now more versatile, as it presents the MV transformer integrated into a steel base frame together with the LV and MV components, including the PV inverters. Moreover, it features a great power density: 317 kW/m<sup>3</sup>.

### **Plug & Play technology**

This MV solution integrates power conversion equipment (up to 5.1 MVA), liquid-filled hermetically sealed transformer up to 36 kV and provision for low voltage equipment.

The MV Skid is delivered pre-assembled for a fast on-site connection with up to two dual PV inverters from Ingeteam's B Series central inverter family.

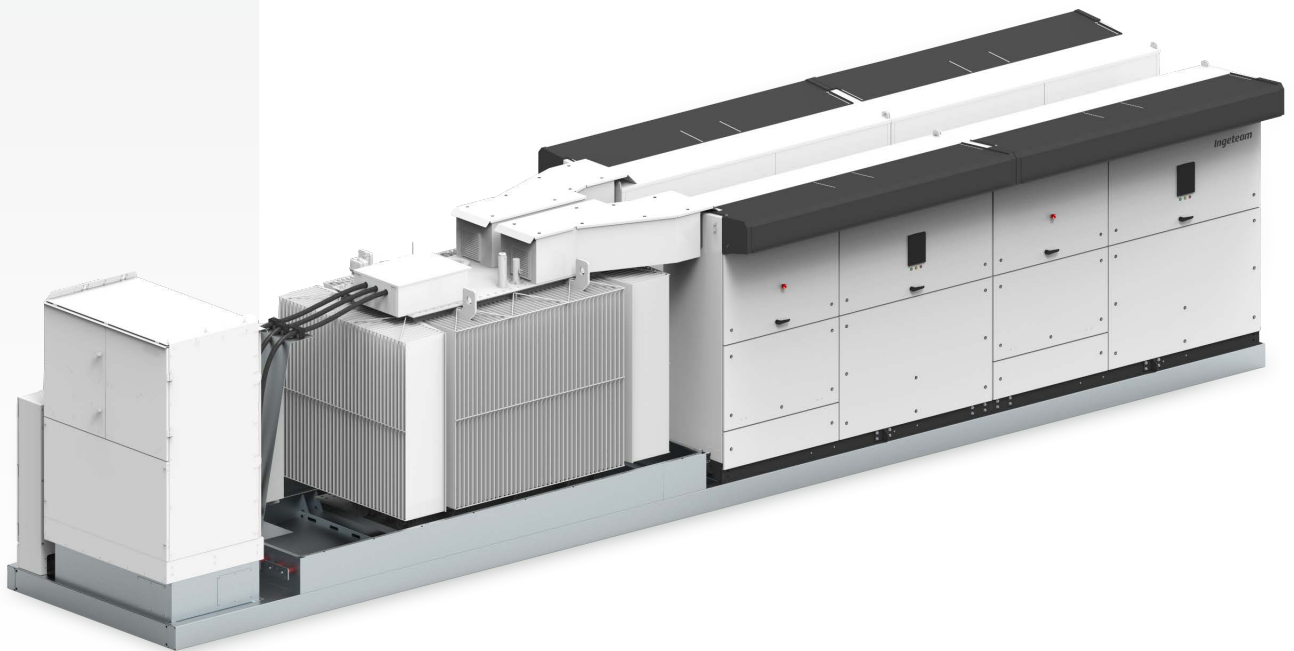
### **Complete accessibility**

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

### **Maximum protection**

Ingeteam's B Series central inverters integrate the latest generation electronics and a much more efficient electronic protection. 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.

Furthermore, the electrical connection between the inverters and the transformer is fully protected from direct contact.



CONSTRUCTION

- Steel base frame.
- Suitable for slab or piers mounting.
- Compact design, minimizing freight costs.

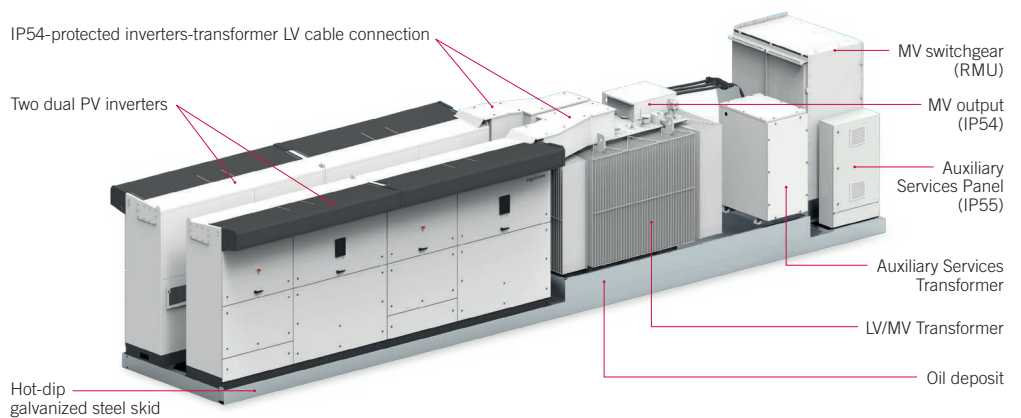
OPTIONAL ACCESORIES

- Auxiliary services transformer (up to 50 kVA, Dyn11).
- UPS for monitoring (1.5 kVA, 30 min).
- LV Surge arresters type I+II.
- MV Surge arresters.
- Low voltage distribution panel (IP55).
- Power plant commissioning.
- High-speed Ethernet / fibre optic communication infrastructure for Plug & Play connection to the Power Plant Controller and/or SCADA systems.
- INGECON® SUN StringBox with 4 to 24 input channels. Intelligent or passive string combiner box.
- Energy meter for auxiliary services and/or energy production.
- Insulation monitoring relay for continuous monitoring of IS systems insulation.
- Reactive power regulation when there is no PV power available.
- Ground connection of the PV array.

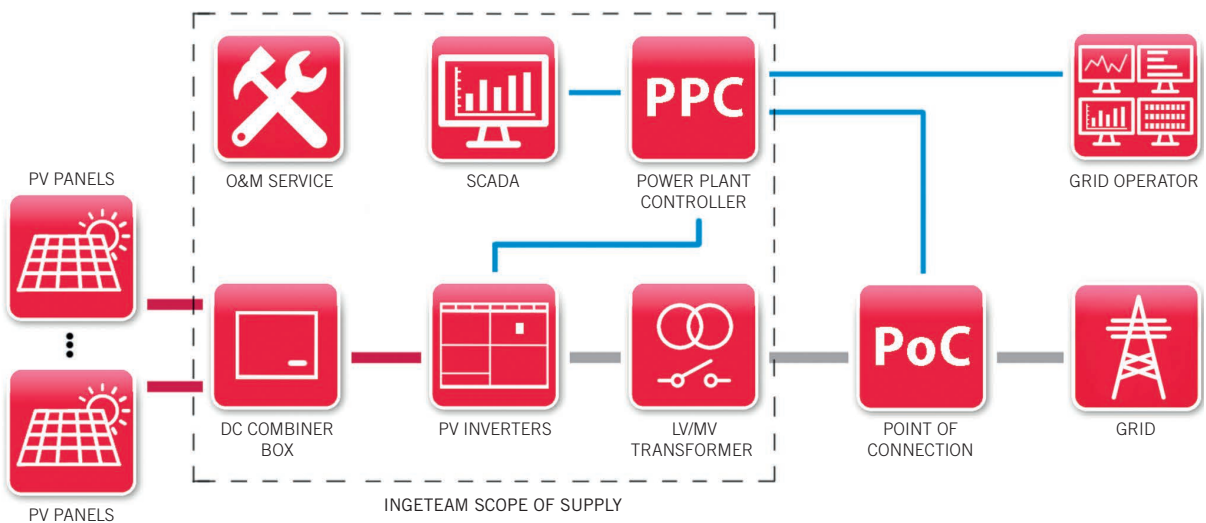
STANDARD EQUIPMENT

- Up to four inverters with an output power of 5.1 MVA.
- Liquid-filled hermetically sealed transformer up to 36 kV.
- 1L1A MV switchgear (2L1A optional).
- Oil-retention tank.
- Frame for installation of LV equipment.
- Minimum installation at project site.

COMPONENTS



PV PLANT CONFIGURATION

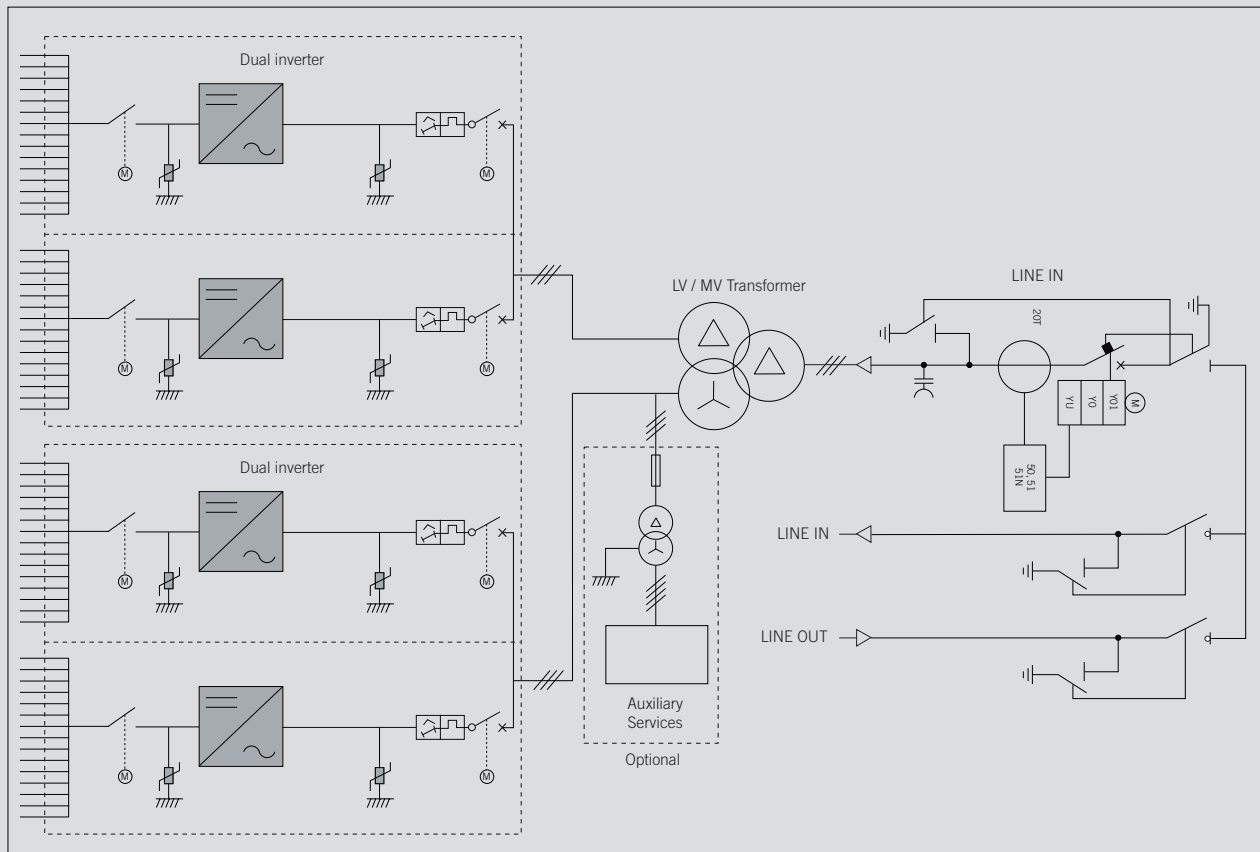


- Communication
- DC Power
- AC Power

	1275 FSK B Series	2550 FSK B Series	3825 FSK B Series	5100 FSK B Series
<b>General data</b>				
Number of inverters	1	2	3	4
Max. power @35 °C / 95 °F <sup>(1)</sup>	1,275 kVA	2,550 kVA	3,825 kVA	5,100 kVA
Operating temperature range	from -20 °C to +50 °C			
Relative humidity (non-condensing)	0 - 100%			
Maximum altitude	3,000 masl (power derating starting at 1,000 masl)			
<b>LV / MV Transformer</b>				
Medium voltage	From 20 kV up to 35 kV, 50-60 Hz			
Cooling system	ONAN			
Minimum PEI (Peak Efficiency Index) <sup>(2)</sup>	99.40%			
Protection degree	IP54			
<b>MV Switchgear</b>				
Medium voltage	24 kV / 36 kV / 40.5 kV			
Rated current	630 A			
Cooling system	Natural air ventilation			
Protection degree	IP54			
<b>Equipment</b>				
LV-AUX Switchgear	Standard version (optional monitoring system)			
LV / MV Transformer	Oil-immersed hermetically sealed transformer			
MV Switchgear	1L1A cells (2L1A optional)			
<b>Mechanical information</b>				
Structure type	Hot dip galvanized steel skid			
Dimensions Full Skid (W x D x H)	8,570 x 2,100 x 2,460 mm	11,390 x 2,100 x 2,460 mm	11,390 x 2,100 x 2,460 mm	11,390 x 2,100 x 2,460 mm
Full Skid	13 T	16 T	19 T	25 T
Standards	IEC 62271-212, IEC 62271-200, IEC 60076, IEC 61439-1			

Notes: <sup>(1)</sup> Maximum power calculated with the inverter model INGECON® SUN 1275TL B460. For other inverter models, please contact Ingeteam's Solar sales department <sup>(2)</sup> For European installations, ECO design according to the EU 548/2014 and EU 2019/1783 standards.

**Configuration with four B Series PV inverters**



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