

**MEDIUM VOLTAGE
POWER STATION,
CUSTOMIZED
UP TO 6.86 MVA,
WITH ALL THE
COMPONENTS
SUPPLIED ON TOP
OF A FULL SKID**

From 1 to 6.86 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 FSK B Series 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 four battery inverters (two dual battery 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 base frame together with the LV and MV components, including the battery inverters.

Plug & Play technology

This MV solution integrates power conversion equipment (up to 6.86 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 battery inverters from Ingeteam's B Series central battery inverter family.

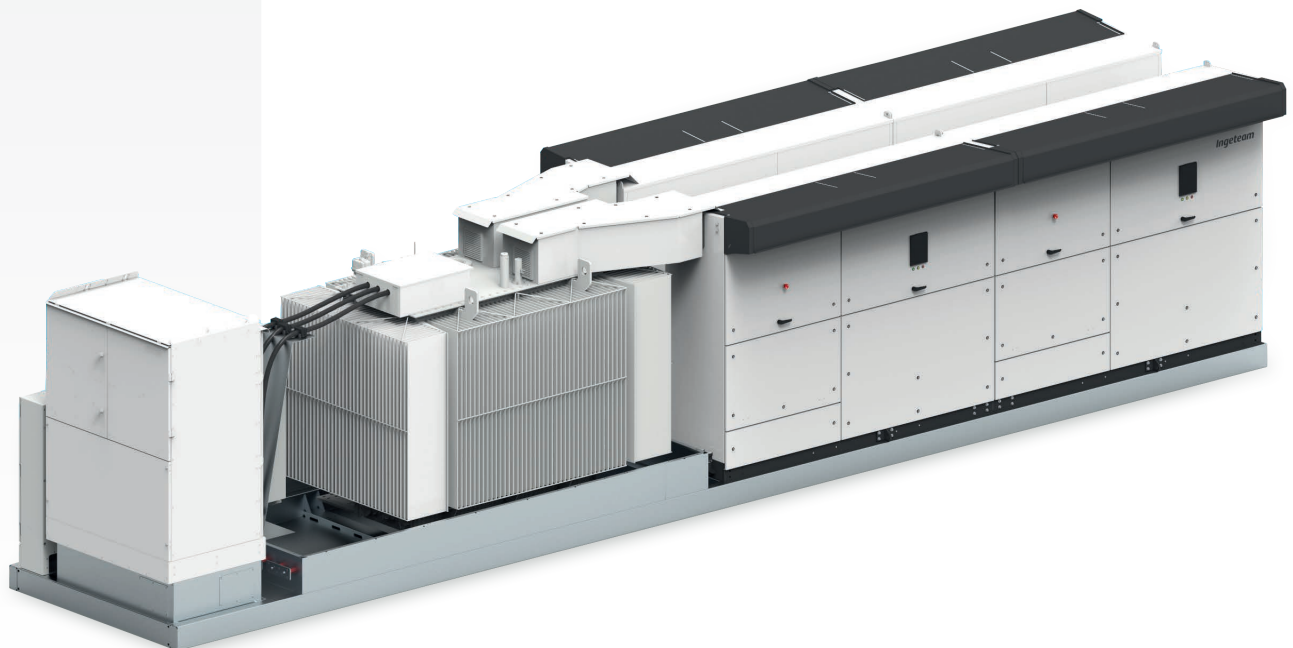
Complete accessibility

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 battery inverters has been conceived to facilitate maintenance and repair works.

Maximum protection

Ingeteam's B Series central battery 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 battery 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.

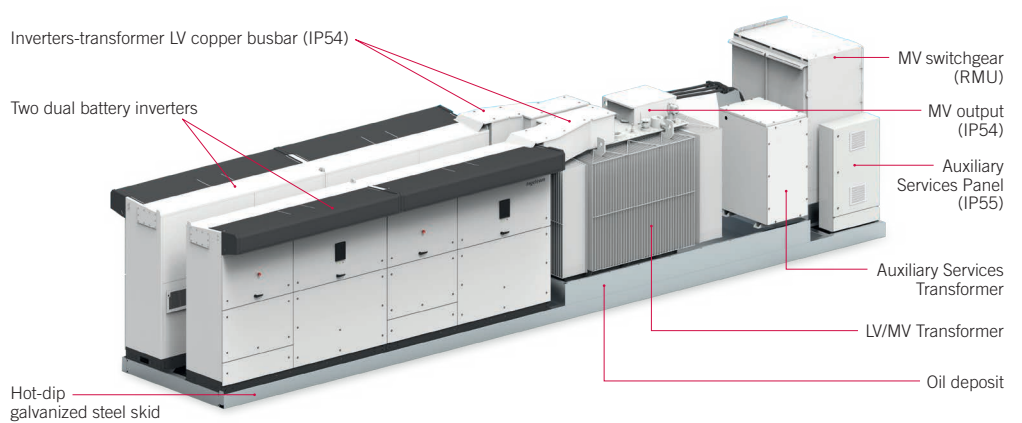
OPTIONAL ACCESSORIES

- 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).
- High-speed Ethernet / fibre optic communication infrastructure for Plug & Play connection to the Power Plant Controller and/or SCADA systems.
- Energy meter for auxiliary services and/or energy production.
- Insulation monitoring relay for continuous monitoring of IS systems insulation.

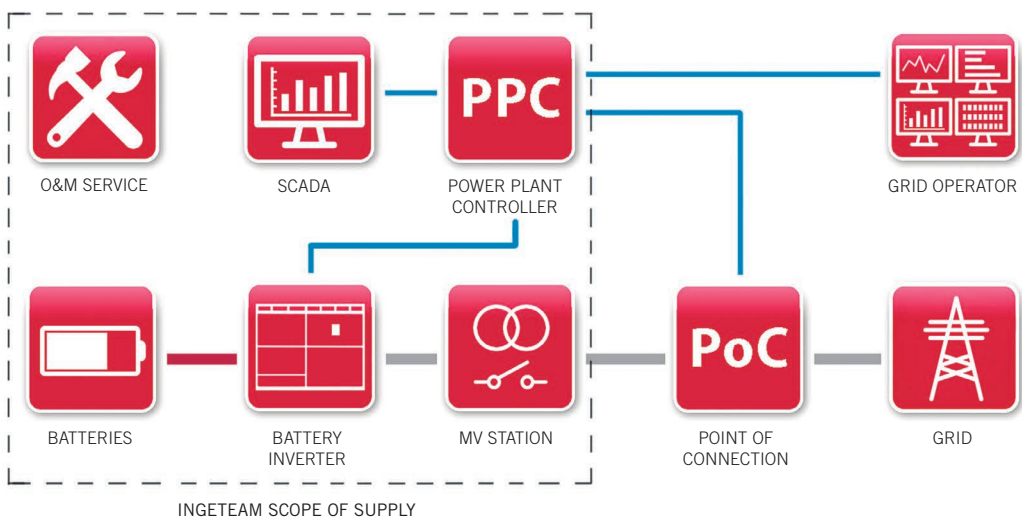
STANDARD EQUIPMENT

- Up to four battery inverters with an output power of 6.86 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



PLANT CONFIGURATION

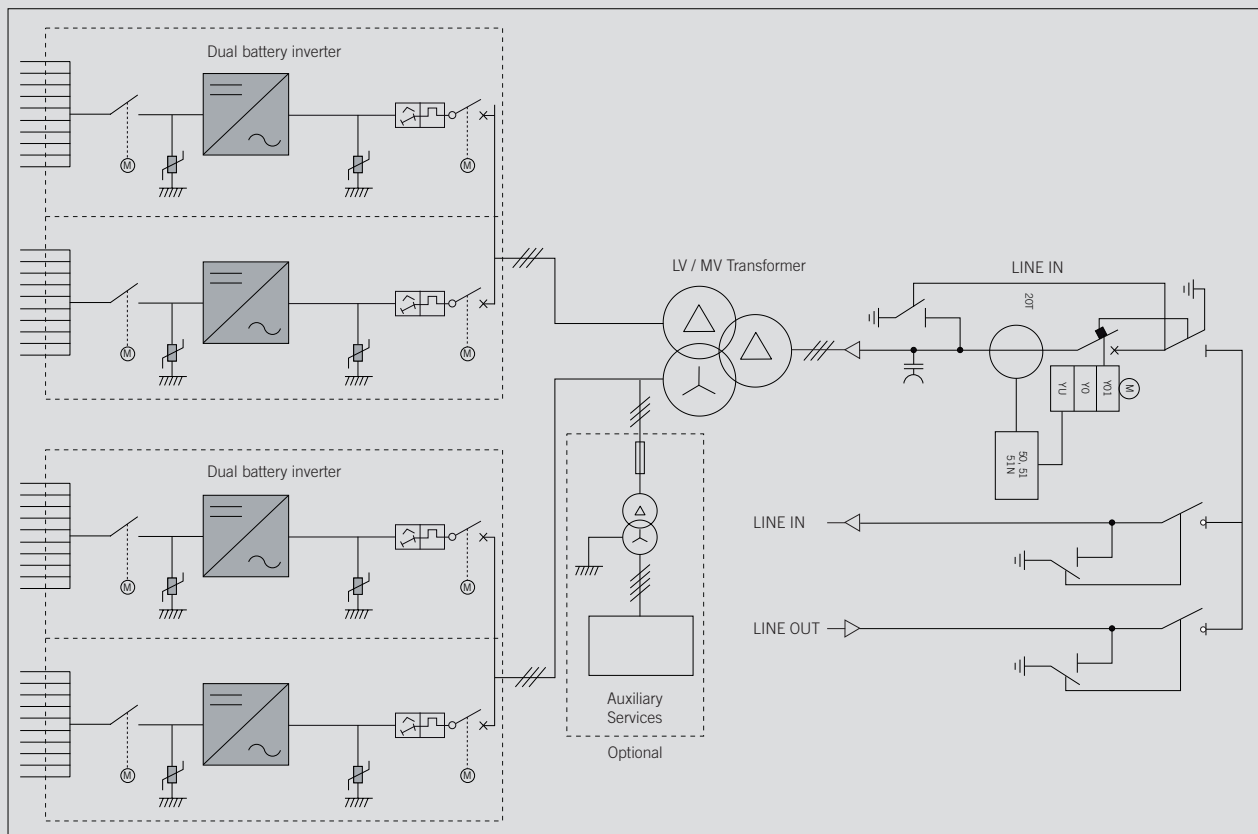


- Communication
- DC Power
- AC Power

	1715 FSK	3430 FSK	5145 FSK	6860 FSK
General data				
Number of inverters	1	2	3	4
Max. power @30 °C / 86 °F ⁽¹⁾	1,715 kVA	3,430 kVA	5,145 kVA	6,860 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)			
LV / MV Transformer				
Medium voltage	From 20 kV up to 35 kV, 50-60 Hz			
Cooling system	ONAN			
Minimum PEI (Peak Efficiency Index) ⁽²⁾	99.40%			
Protection degree	IP54			
MV Switchgear				
Medium voltage	24 kV / 36 kV / 40.5 kV			
Rated current	630 A			
Cooling system	Natural air ventilation			
Protection degree	IP54			
Equipment				
LV-AUX Switchgear	Standard version (optional monitoring system)			
LV / MV Transformer	Oil-immersed hermetically sealed transformer			
MV Switchgear	1L1A cells (2L1A optional)			
Mechanical information				
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: ⁽¹⁾ Maximum power calculated with the battery inverter model INGECON® SUN STORAGE 1715TL B660. For other battery inverter models, please contact Ingeteam's BESS sales department ⁽²⁾ For European installations, ECO design according to the EU 548/2014 and EU 2019/1783 standards.

Example of configuration with four B Series battery inverters





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