

**MEDIUM VOLTAGE
INVERTER STATION,
CUSTOMIZED
UP TO 7.20 MVA**

From 1170 to 7200 kVA

This brand new medium voltage solution integrates all the devices required for a multi-megawatt 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 features a LV / MV shelter that can be customized to suit every customer's requirements.

Plug & Play technology

This MV solution integrates power conversion equipment –up to 7.20 MVA-, liquid-filled hermetically sealed transformer up to 34.5 kV and provision for low voltage equipment.

The LV / MV shelter integrates the LV panel, indoor MV switchgear and auxiliary services transformer. It can also feature a UPS for auxiliary services and an air conditioner in order to improve the cooling system.

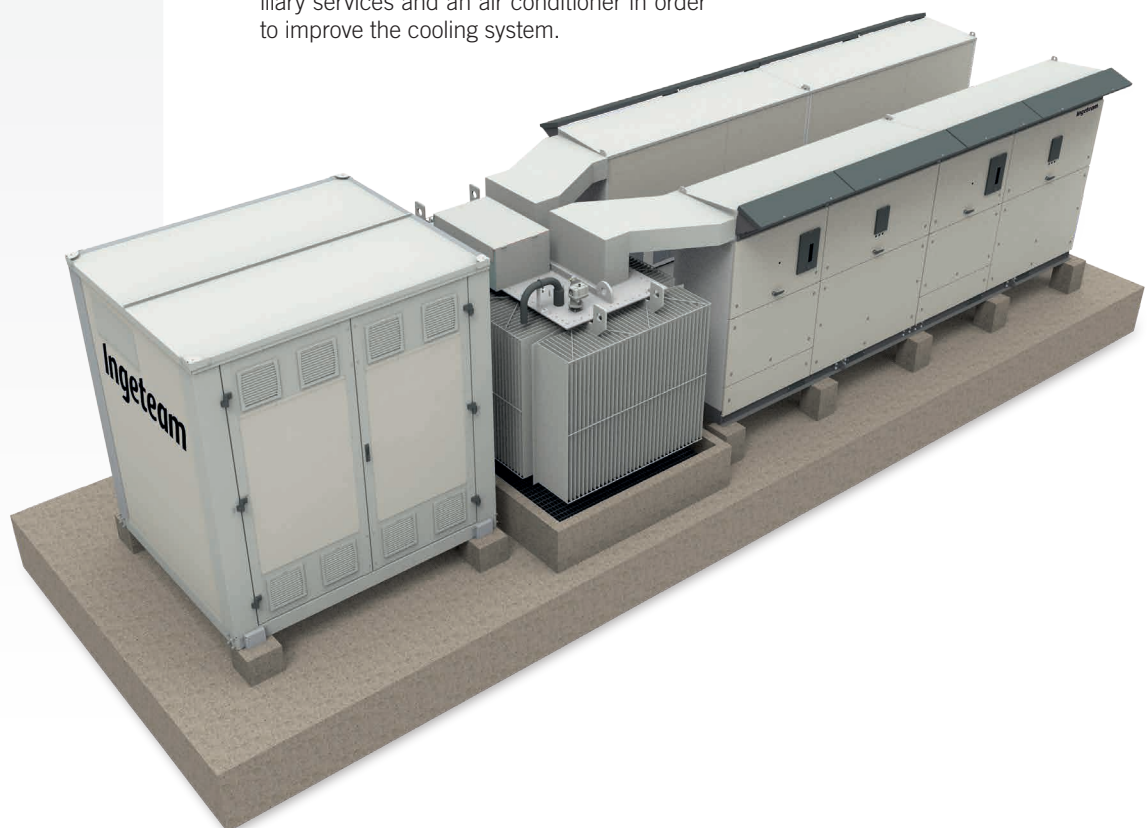
Complete accessibility

Thanks to the lack of housing, the inverters 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. Independent accesses to the shelter's low and medium voltage cubicles.

Maximum protection

Ingeteam 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.



Medium voltage inverter station, customized up to 7.20 MVA

STANDARD EQUIPMENT

- From one up to four inverters with an output power of 7.2 MVA.
- Liquid-filled hermetically sealed transformer up to 34.5 kV with reduced power losses.
- LV / MV Shelter integrating the LV panel, MV switchgear and auxiliary services transformer.

OPTIONS UPON REQUEST

Electrical gear as per customer necessities:

- Low voltage distribution panels.
- UPS for auxiliary services.
- Start-up at the system site.
- Air conditioning cooling system.
- High-speed Ethernet/Fiber Optic communication system for a plug-and-play connection to the PPC or SCADA.
- INGECON® SUN StringBox with 16, 24 or 32 input strings.
- Gateway for the grid operator to monitor and control the PV plant by using standard protocols, like IEC61850, IEC60870-5-101/104, DNP 3.0, etc.
- Sand trap kit.
- Meteo station.

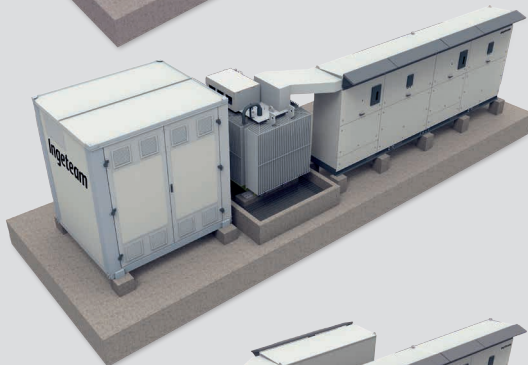
- Energy meter for the auxiliary services and/or energy production.
- Insulation monitoring relay for the IT systems.
- Reactive power regulation without PV power.
- Ground connection of the PV array.

Four possible configurations



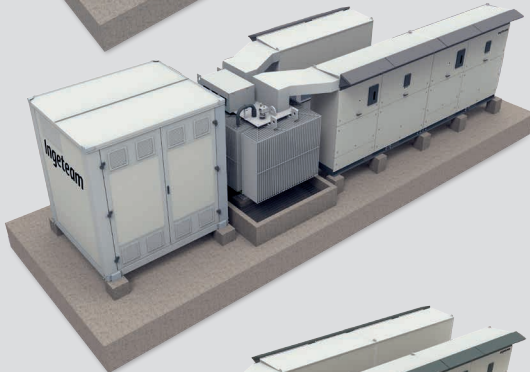
Single Inverter Station

From 1,170 up to 1,800 kVA.



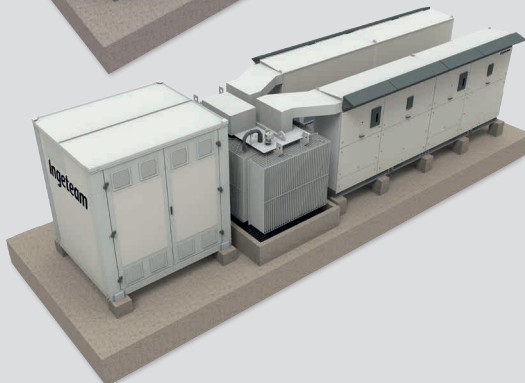
Dual Inverter Station

From 2,340 up to 3,600 kVA.



Single Inverter + Dual Inverter Station

From 3,510 up to 5,400 kVA.



Double Dual Inverter Station

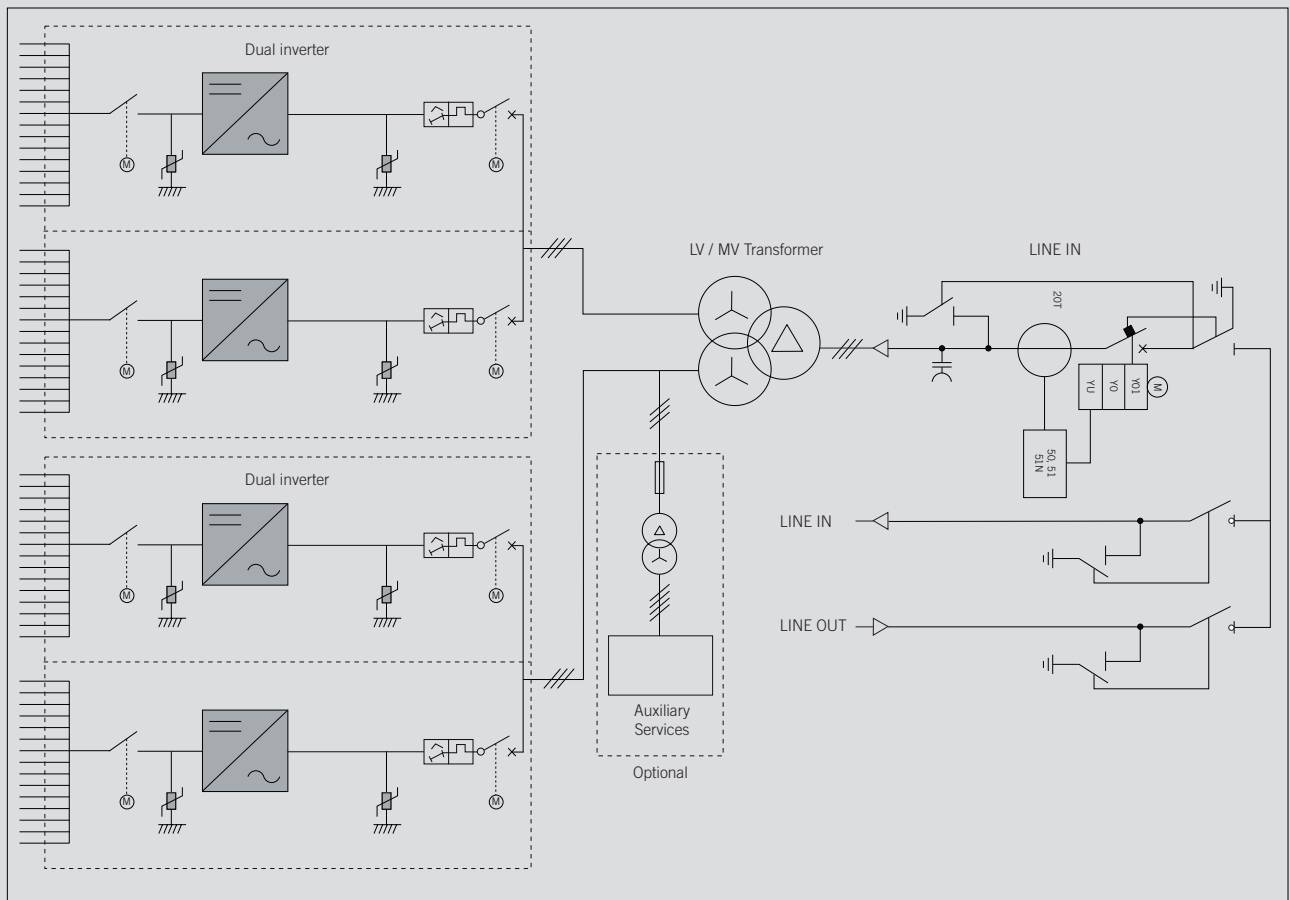
From 4,680 up to 7,200 kVA.

Medium voltage inverter station, customized up to 7.20 MVA

	SHE8 - Single Inverter	SHE8 - Dual Inverter	SHE8 - Single + Dual Inverter	SHE8 - Double Dual Inverter
Number of inverters	1	2	3	4
Power IP54 @30 °C / 86 °F ⁽¹⁾	1,793 kVA	3,586 kVA	5,379 kVA	7,172 kVA
Power IP54 @50 °C / 122 °F ⁽¹⁾	1,613 kVA	3,227 kVA	4,839 kVA	6,452 kVA
Power IP56 @27 °C / 81 °F ⁽¹⁾	1,793 kVA	3,586 kVA	5,379 kVA	7,172 kVA
Power IP56 @50 °C / 122 °F ⁽¹⁾	1,587 kVA	3,174 kVA	4,761 kVA	6,348 kVA
Voltage class	24 - 36 kV	24 - 36 kV	24 - 36 kV	24 - 36 kV
Installation altitude ⁽²⁾	Up to 4,500 m (14,765 ft)	Up to 4,500 m (14,765 ft)	Up to 4,500 m (14,765 ft)	Up to 4,500 m (14,765 ft)
Operating temperature range ⁽²⁾	-20 °C to +57 °C / -4 °F to +135 °F	-20 °C to +57 °C / -4 °F to +135 °F	-20 °C to +57 °C / -4 °F to +135 °F	-20 °C to +57 °C / -4 °F to +135 °F

Notes: ⁽¹⁾ Power referring to the model INGECON® SUN PowerMax 1800TL B690 IP54/IP56 ⁽²⁾ During the RFQ please indicate the maximum ambient temperature, IP rating and altitude in order to size all devices properly.

Configuration with two dual inverters





Ingeteam Power Technology, S.A.
Avda. Ciudad de la Innovación, 13
31621 SARRIGUREN (Navarra) - Spain
Tel.: +34 948 288 000 / Fax: +34 948 288 001
e-mail: solar.energy@ingeteam.com

Ingeteam S.r.l.
Via Emilia Ponente, 232
48014 CASTEL BOLOGNESE (RA) - Italy
Tel.: +39 0546 651 490 / Fax: +39 054 665 5391
e-mail: italia.energy@ingeteam.com

Ingeteam SAS
La Naurouze B - 140 rue Carmin
31670 Labège - France
Tel: +33 (0)5 61 25 00 00 / Fax: +33 (0)5 61 25 00 11
e-mail: france@ingeteam.com

Ingeteam INC.
3550 W. Canal St.
MILWAUKEE, WI 53208 - USA
Tel.: +1 (414) 934 4100 / +1 (855) 821 7190 / Fax: +1 (414) 342 0736
e-mail: solar.us@ingeteam.com

Ingeteam, a.s.
Technologická 371/1
70800 OSTRAVA - PUSTKOVEC
Czech Republic
Tel.: +420 59 732 6800 / Fax: +420 59 732 6899
e-mail: czech@ingeteam.com

Ingeteam, S.A. de C.V.
Ave. Revolución, n° 643, Local 9
Colonia Jardín Español - MONTERREY
64820 - NUEVO LEÓN - México
Tel.: +52 81 8311 4858 / Fax: +52 81 8311 4859
e-mail: northamerica@ingeteam.com

Ingeteam Ltda.
Rua Estácio de Sá, 560
Jd. Santa Genebra
13080-010 Campinas/SP - Brazil
Tel.: +55 19 3037 3773
e-mail: brazil@ingeteam.com

Ingeteam Pty Ltd.
Unit 2 Alphen Square South
16th Road, Randjiespark
Midrand 1682 - South Africa
Tel.: +2711 314 3190 / Fax: +2711 314 2420
e-mail: southafrica@ingeteam.com

Ingeteam SpA
Los militares 5890, Torre A, oficina 401
7560742 - Las Condes
Santiago de Chile - Chile
Tel.: +56 2 29574531
e-mail: chile@ingeteam.com

Ingeteam Power Technology India Pvt. Ltd.
2nd Floor, 431
Udyog Vihar, Phase III
122016 Gurgaon (Haryana) - India
Tel.: +91 124 420 6491-5 / Fax: +91 124 420 6493
e-mail: india@ingeteam.com

Ingeteam Sp. z o.o.
Ul. Koszykowa 60/62 m 39
00-673 Warszawa - Poland
Tel.: +48 22 821 9930 / Fax: +48 22 821 9931
e-mail: polska@ingeteam.com

Ingeteam Australia Pty Ltd.
iAccelerate Centre, Building 239
Innovation Campus, Squires Way
North Wollongong, NSW 2500 - Australia
Tel.: +61 499 988 022
e-mail: australia@ingeteam.com

Ingeteam Panama S.A.
Calle Manuel Espinosa Batista, Ed. Torre Internacional
Business Center, Apto./Local 407 Urb.C45 Bella Vista
Bella Vista - Panama
Tel.: +50 761 329 467

Ingeteam Service S.R.L.
Bucuresti, Sector 2, Bulevardul Dimitrie Pompeiu Nr 5-7
Cladirea Hermes Business Campus 1, Birou 236, Etaj 2
Romania
Tel.: +40 728 993 202

Ingeteam Philippines Inc.
Office 2, Unit 330, Milelong Bldg.
Amorsolo corner Rufin St.
1230 Makati
Gran Manila - Philippines
Tel.: +63 0917 677 6039

Ingeteam