

**DC-DC CONVERTER  
FOR 1,500 V  
BATTERY ENERGY  
STORAGE SYSTEMS**

**INGECON® SUN STORAGE 430 DC-DC**

Bi-directional buck converter for battery energy storage 1500 V system addressed to central Power Conversion Systems (PCS) solutions.

**Highest flexibility and scalability for any battery configuration**

The INGECON® SUN STORAGE 430 DC/DC can be parallelized in order to adjust the PCS power to different battery configurations. This way, it makes easier the design of a wide diversity energy storage systems.

**BESS augmentation strategy**

This converter allows for deploying a modular BESS augmentation strategy to compensate battery degradation over time.

**5 year warranty, extendible up to 25 years**

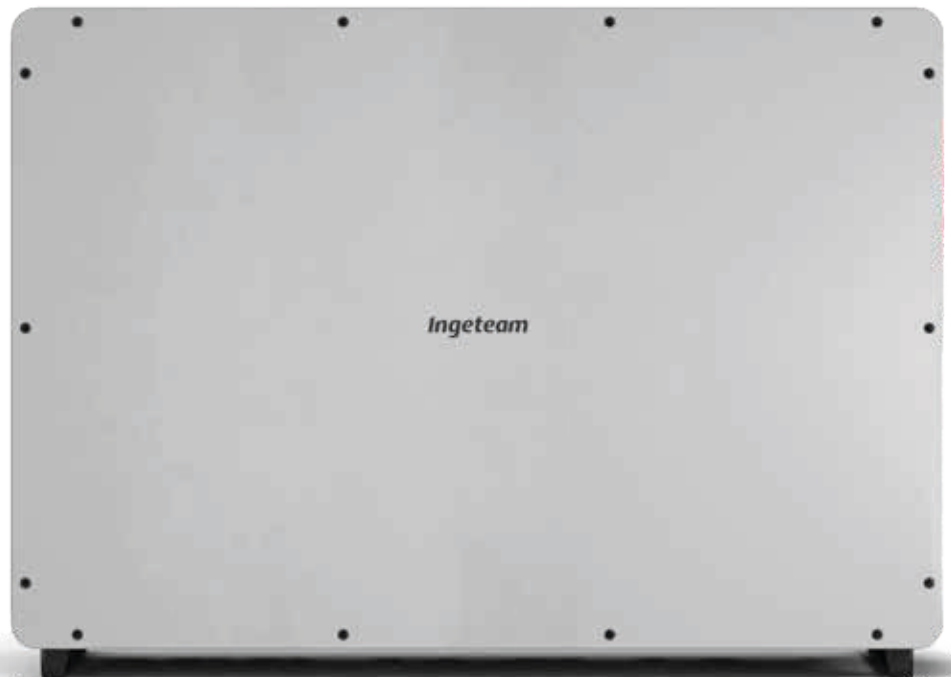
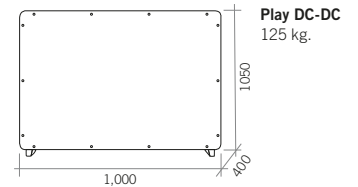
**PROTECTIONS**

- Type II surge arresters.
- Battery reverse polarity.
- Manual DC switch.

**FEATURES**

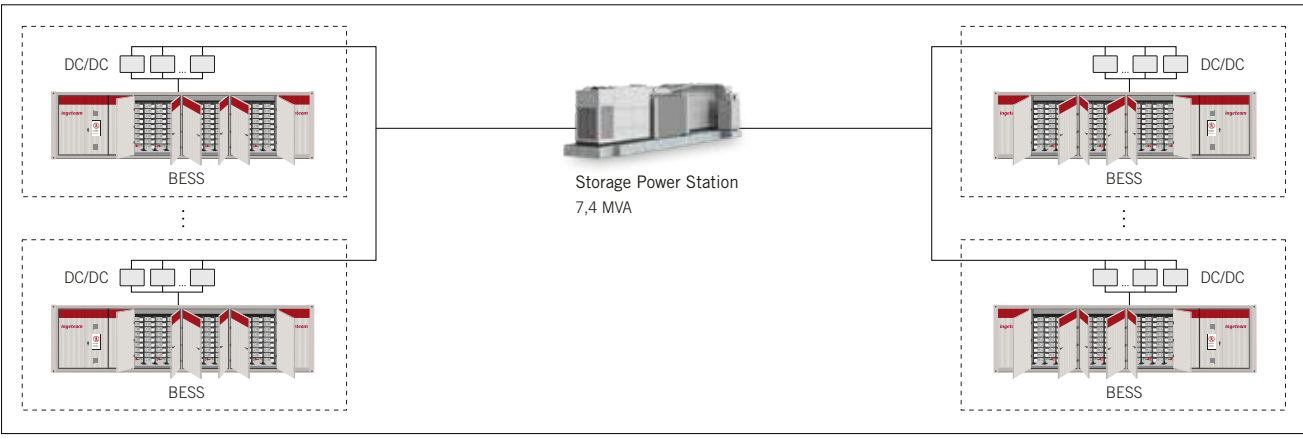
- Three-level topology.
- 360 A output current.
- BESS-level battery management.
- Compatible with 1,500 V battery systems.
- Forced air ventilation for an optimized converter cooling.
- High protection degree IP66 / NEMA 3R.
- Fast & easy commissioning.
- Integrated web interface.

**SIZE AND WEIGHT (MM)**

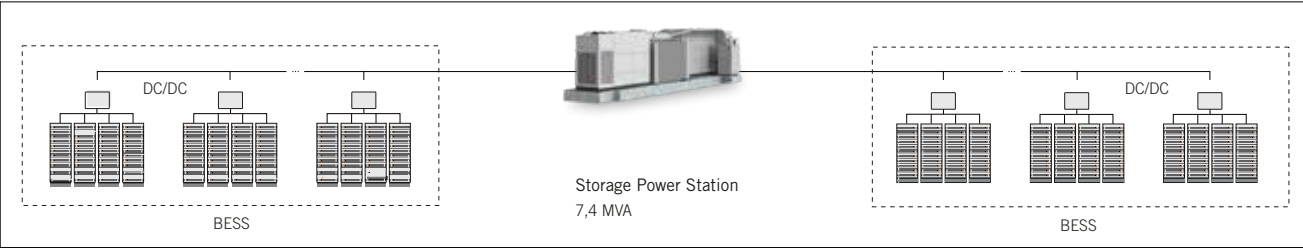


Specifications included in this datasheet could change without notice. Please contact Ingeteam's sales department in case of any queries.

SOLUTION FOR BATTERY CONTAINERS WITH A SINGLE OUTPUT:  
converters with battery input and DC bus input in parallel



SOLUTION FOR INDEPENDENT RACKS:  
Converters with DC bus input in parallel

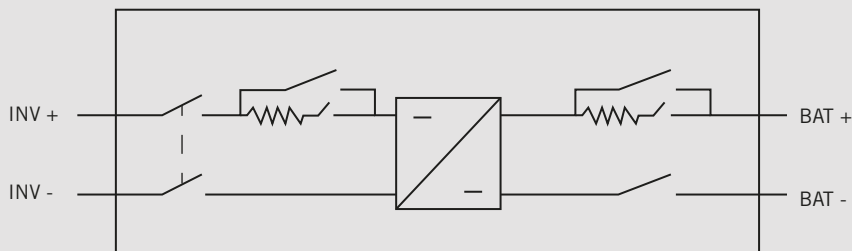


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430 DC-DC	
<b>Rated power</b>	
Nominal power @ 1,200 Vdc	432 kW
<b>Battery side</b>	
Max. DC voltage	1,500 V
Operating voltage range <sup>(1)</sup>	500 - 1,500 V
Number of inputs	1
Max. DC current per input @35 °C / 50 °C	360 A / 310 A
<b>DC bus side</b>	
Max. DC voltage	1,500 V
Operating voltage range	500 - 1,500 V
Max. DC current	360 A
<b>Protections</b>	
Overvoltage protections	Type II surge arresters
Reverse polarity	Yes
Overheat protection	Yes
<b>General information</b>	
Maximum efficiency	99%
Cooling system	Forced ventilation
Air flow	900 m <sup>3</sup> /h
Stand-by consumption	25 W
Operation temperature	-30 °C to +60 °C
Relative humidity (non-condensing)	0 - 100%
Protection class	IP66 / NEMA 3R
Residual current monitoring unit	Yes
Maximum operating altitude	4,000 m (for installations beyond 1,000 m, please contact Ingeteam's solar sales department)
Marking	CE
Compliance	IEC 62477-1; IEC 62109-1; UL1741

**Notes:** <sup>(1)</sup> Minimum voltage of DC/DC must be higher than DC bus of central inverter.

**Single-line diagram**





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