

ST 5 MWh

Maximize your energy savings with our innovative solution.

By developing cutting-edge technological solutions, our BESS is designed to optimize your plant's energy efficiency. Equipped with a sophisticated energy management system, our product ensures exceptional battery life and unprecedented energy performance. Invest in the future of energy with our innovative solution.

Our 5 MWh BESS (Battery Energy Storage System), housed in a standard 20-feet container, represents a state-of-the-art solution for utility-scale energy storage. This compact and modular configuration is designed to meet the specific needs of the utility-scale market, offering numerous advantages in terms of flexibility, efficiency, and sustainability.



How it works PV INVERTER AC EMS AC GRID Direct current CO Communication AC Alternating current Direction

Applications

Capacity

This highly efficient product can store a significant amount of energy from renewable sources like solar or wind (Hybrid Plant) or serve as a standalone storage unit, releasing it into the grid during peak demand periods.

Dimensions

The 20-feet containerized format facilitates transportation, installation, and system scalability, allowing the total capacity to be adjusted according to the customer's needs.

Technology

The system utilizes lithium-ion batteries, known for their high energy density, long life, and fast charging and discharging capabilities.

Cooling and Safety Systems

These ensure the optimal and safe operation of the system under any environmental conditions.

Control software

Allows for the management and optimization of the system's operation based on customer needs and grid conditions.

European Production

Entirely produced and assembled at our facility in Valencia, Spain.

Integrated Solution

The option of a fully integrated system, complete with BESS and scalable, tested PCS solutions, is available. This solution minimizes installation time and improves the product's operational performance.







ST 5 MWh

Characteristics

Technology LFP
Configuration 12*1P416S

DC side

Max DC voltage1497,6VNominal DC voltage1331,2VMin DC voltage1123,2V

DC voltage range 1123,2V-1497,6V

Max DC current 1884A

Efficiency

Max efficiency 99 %
European efficiency 98,50%

Protection

DC input protection (fuse) 4000A
Load Break Switch 3600A
Surge protection T1+ T2
Visual monitoring Yes

Overheat protection BMS Controller

Characteristics

Dimensions (W x H x D) 6058x2896x2438 mm Standard charge and discharge 0,5C

Sound emission (dBA) MAX 55
Weight 38 Ton

Operating temperature (°C) Charge between 0°C & 55°C

Discharge between -20°C & 55°C

Allowable relative humidity range From 0% to 90%

Cooling method Forced liquid cooling

Max operating altitude (m) 4000

Derating operative altutude (m) 2000

Display PDMU + External Display + Remote Monitoring

Communication CAN BUS / MOD BUS

Compliance CE / UN38.3 *

Warranty

 Cycles
 8000 **

 Years
 5 **

Complience and Regulations

Electromagnetic Compability (EMC) 2014/30/EU

Low Voltage Directive 2014/35/EU

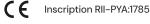
RoHS Directive 2011/65/EU

EN 61000-6-3:2021

Product safety device 2001/95/CE UN 38.3

Regulation UE 2023/1542

^{**} This product is subject to specific warranty conditions. Please refer to the terms and conditions for detailed information on the applicable warranty.



Ref. ST5-1024-EN www.ingeniumren.com

Spain · Italy · Balkans contact@ingeniumren.com



^{*} In progress.