

EEI 8YS ON-BOARD STORAGE SYSTEM

EEI's Hybrid solution oriented towards navigation with reduced environmental impact.

The 8YS-inverters, thanks to the wide functionality and a high level of customization, are able to comply every existing grid code or operate in parallel with diesel group.

The Storage on-board System is a double stage inverter with IGBT technology.

The first stage, connected to the grid, is an Active Front End inverter, while the second stage has a booster or buck/booster configuration. These two parts are connected each other with a DC-link. Both the incoming line and the output are protected.

8YS inverters can be paralleled to obtain multi MW power solutions.

MAIN CHARACTERISTICS

- Inverter enclosure made of 20/10mm steel panels.
- Front opening through lockable doors or bolted panels to ease access to all parts.
- Side and rear access through bolted panels.
- IGBT power circuit
- Film capacitors and low inductance connections in order to ensure high robustness and reliability, extended lifetime
- Easy accessibility and maintenance.
- Digital management of control parameters, alarm diagnostics, analogue and digital I/O signals from dedicated microcontroller and DSP software.
- Communication interfaces between each inverter and the main system PCS-controller, via Modbus
- TCP/IP or Can Open.
- Water Cooling System
- HMI panel with data logger, local control/setting, alarm display.



ADVANCED
Flexible software configuration
allow wide functionalities



ADAPTIVE
Wide range of
batteries compatibility

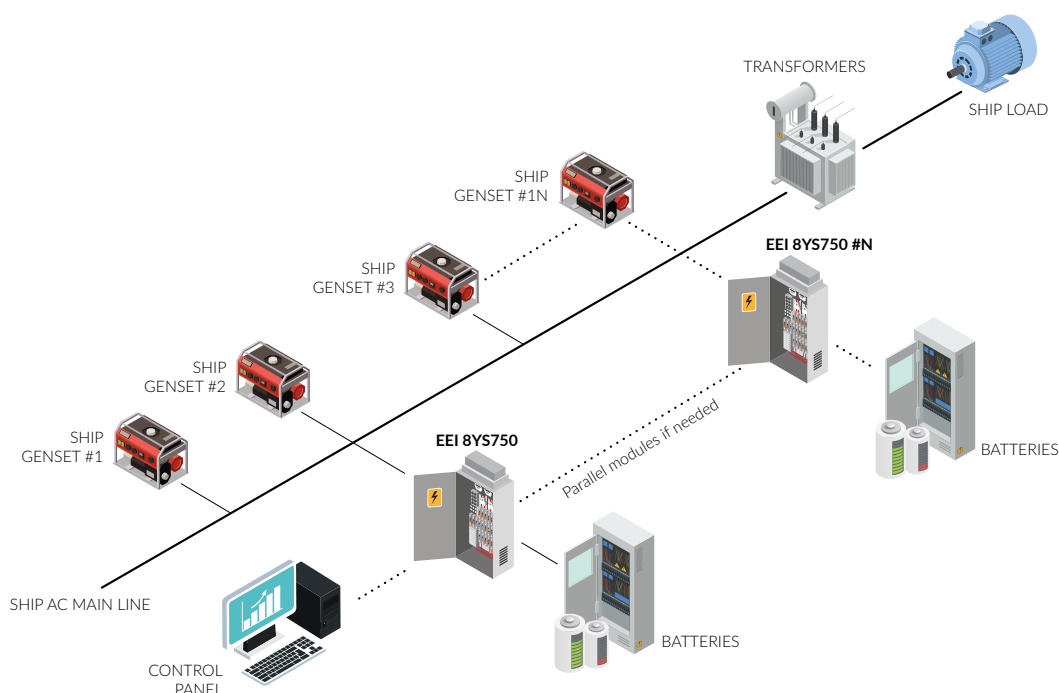


RELIABLE
Equipped with latest power
technology and robust design



MODULAR
Modular design permit
a wide output power range





MODEL

8YS750

GENERAL ELECTRICAL SPECIFICATION

SHIP SIDE

Main voltage	690VAC $\pm 1\%$ 3Ph IT System
Auxiliaires voltage	230 V AC $\pm 10\%$
Rated frequency	60 Hz $\pm 1\%$
Architecture	Active Front End (AFE) IGBT inverter
Rated power	750 kVA@ Cos ϕ =0,85
Overload	110% (only for active power) For 30sec every 10 minutes
Rated current	650 A
Maximum current	700A
THDI	< 3%
Max phases current imbalance	20%

BATTERY SIDE

Architecture	Multi DC/DC Buck-Boost converter
Input Voltage range / Rated Input Voltage	491 \div 692 Vdc / 601 Vdc
Max. charge/discharge current	1600A
Max. charge/discharge power	780 kW
Max. Current ripple	$\pm 1\%$

INSTALLATION

Operating temperature	0°C \div + 50 °C
Storage temperature	-10 °C \div + 70 °C
Relative Humidity	95% @ 20°C no condensing
Altitude	< 1000 m a.s.l.
Protection Degree	IP 31 (1)
Cooling System Type	Water (inlet temperature range + 6 \div 12°C)

WEIGHT AND DIMENSIONS

Length (mm)	2000
Height (mm)	1300
Depth (mm)	1000
Weight (kg)	1800
Protection Degree	IP 31 (1)

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