

On-Board Marine Power Converter

ShoreMaster-BS

10-1000kVA

EnSmart ShoreMaster-BS Series On-Board Frequency Converters Provide Maximum Protection for All Sensitive On Board Marine Equipments and Worldwide Connectivity.



Maximum On-Board Equipment Protection

- Full protection against marina voltage transients
- Clean and stable output power supply
- Precise output voltage and frequency regulation
- Seamless Power Transfer Between Converter and Generator
- Rugged overload capability

Easy Advanced Power Technology

- State-of-the-art IGBT technology with DSP control
- Ultra high overall efficiency 96%
- Maximum Marine Power (PF 0,9 and PF 1 for kW=kVA)
- Wide selection of alarms, indications and measurements
- Advanced Connectivity options

Worldwide Compatible

- Compatible With Worldwide Marine Power Sources
- Complied with all shore power supply regulations
- Marine certified-designed and tested to meet the harsh shipboard environment requirements
- Various protection options from IP23 to IP44



Technical Specifications

MODEL																			
Capacity	10kVA	15kVA	20kVA	30kVA	40kVA	60kVA	80kVA	100kVA	120kVA	160kVA	200kVA	250kVA	300kVA	400kVA	500kVA	600kVA	800kVA	1000kVA	
Power Watt	10kW	15kW	20kW	30kW	40kW	60kW	80kW	100kW	120kW	160kW	200kW	225kW	270kW	360kW	450kW	540kW	720kW	900kW	
INPUT																			
Nominal Voltage	180 to 520 VAC 3 Phase-Phase																		
Frequency Tolerance	50 / 60 Hz ±20% (Selectable)																		
Power Factor	>0.99																		
Total Harmonic Distortion	THDi <3%																		
OUTPUT																			
Power Factor	0.9 (1 Optional)																		
Nominal Voltage	380/400/415/440/480 VAC 3 P (N Optional) (115/690 VAC Optional)																		
Voltage Tolerance	Static ±1%, Dynamic ±3%																		
Frequency Tolerance	50Hz / 60Hz ±0,01%																		
Output THD	Linear Load <1% / Non-Linear Load <3%																		
Crest Factor	3:1																		
Overload Capacity*	At 125% Load 10min, at 150% Load 1min																		
Efficiency (Online Mode)	93%																		
Efficiency (Eco Mode)	Up to 99%																		
BYPASS																			
Nominal Voltage	380/400/415 VAC 3 Phase + N																		
Voltage Tolerance	15% (Configurable from 10% to 30%)																		
Frequency Tolerance	±5 (Selectable)																		
ENVIRONMENTAL																			
Operating Temperature	0°C / +40°C																		
Storage Temperature	-15°C / +45°C																		
Protection Class	IP20																		
Humidity	0-95% Without Condensation																		
Altitude	<1000m, Correction Factor 1. <2000m, Correction Factor >0.92, <3000m; Correction Factor >0.84																		
Noise Level	<53 dBA	<55 dBA	<60 dBA	<65 dBA	<72 dBA	<74 dBA	<75 dBA												
COMMUNICATION																			
Communication Port	RS232 (Standart), RS485, MOD-Bus, J-Bus, Web, Tel-Net, GPRS, CAN-Bus, SNMP (Option)																		
STANDARDS																			
Quality	ISO 9001, ISO 14001, ISO 18001, TSE-HYB																		
Performance	EN62040-3 (VFI-SS-111, Bureau Veritas Certified)																		
EMC/LVD	EN62040-2, EN62040-1, EN60950, (TÜV SÜD Certified)																		
DIMENSIONS & WEIGHT																			
Cabinet Dimensions (mm)	Width						600						1750	1850	Dimensions can be displayed according to request. Please contact us for more than 300kVA.				
	Depth						775						960	960					
	Height						1300						1840	1840					

Confirm the product dimensions for output voltage requests over 208V and 690V. Ensmart reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Ensmart products previously or subsequently sold. Ensmart does not guarantee the items of the accuracy and completeness.

Highlights



Reliable and Robust
Power coated for ultimate durability and protection



Marine Approved
MeetS all marine classification societies such as ABS, DNV GL, Lloyd's Register, etc.



Easy Installation
Small footprint and front access for easy service

Turn Your Ship To A Global Vessel

EnSmart ShoreMaster-OB converters are universal. They are fully compatible with all types of marina power source and all shore supply regulations, it converts the

shore power and frequency to a highly reliable and safe onboard power supply.

Highest Reliability For Marine Industry

EnSmart ShoreMaster-OB converters are universal. They are fully compatible with all types of marina power source and all shore supply regulations, It converts the shore power and frequency to a highly reliable and safe onboard power supply.

cramped spaces and unstable electrical conditions in typical marine environments.


Every ShoreMaster converter are equipped with an isolation transformer to protect against galvanic corrosion, polarization, and fault current electrocution. They can meet all marine classification societies such as ABS, DNV GL, Lloyd's Register, etc.


EnSmart Power engineers designed the ShoreMaster Converter to withstand harsh environmental conditions such as vibrations, shocks, high temperatures and

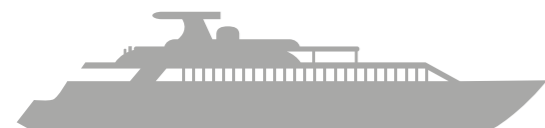
10 15 20 30 60 80 100 120 160 200 250 300 400 500 600 800 1000 kVA

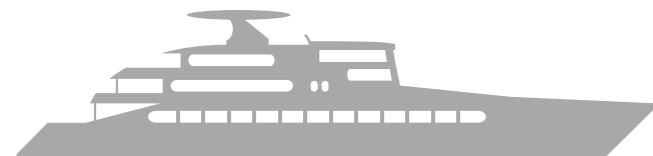
COMMONLY INSTALLED ON


CRUISERS (10-16 meters)


YACHTS (17-23 meters)


SUPERYACHTS (24-45 meters)


MEGAYACHTS (46-65 meters)


GIGAYACHTS (66-90 meters)

EVERYTHING A YACHT NEED

- Auto-Restart from shore brownout or blackout
- Conformal coated printed circuit boards
- Front panel display console
- Minimal harmonic distortion
- Reverse polarization prevention
- Galvanic corrosion protection
- Global support network
- Precision regulation

Standard Features

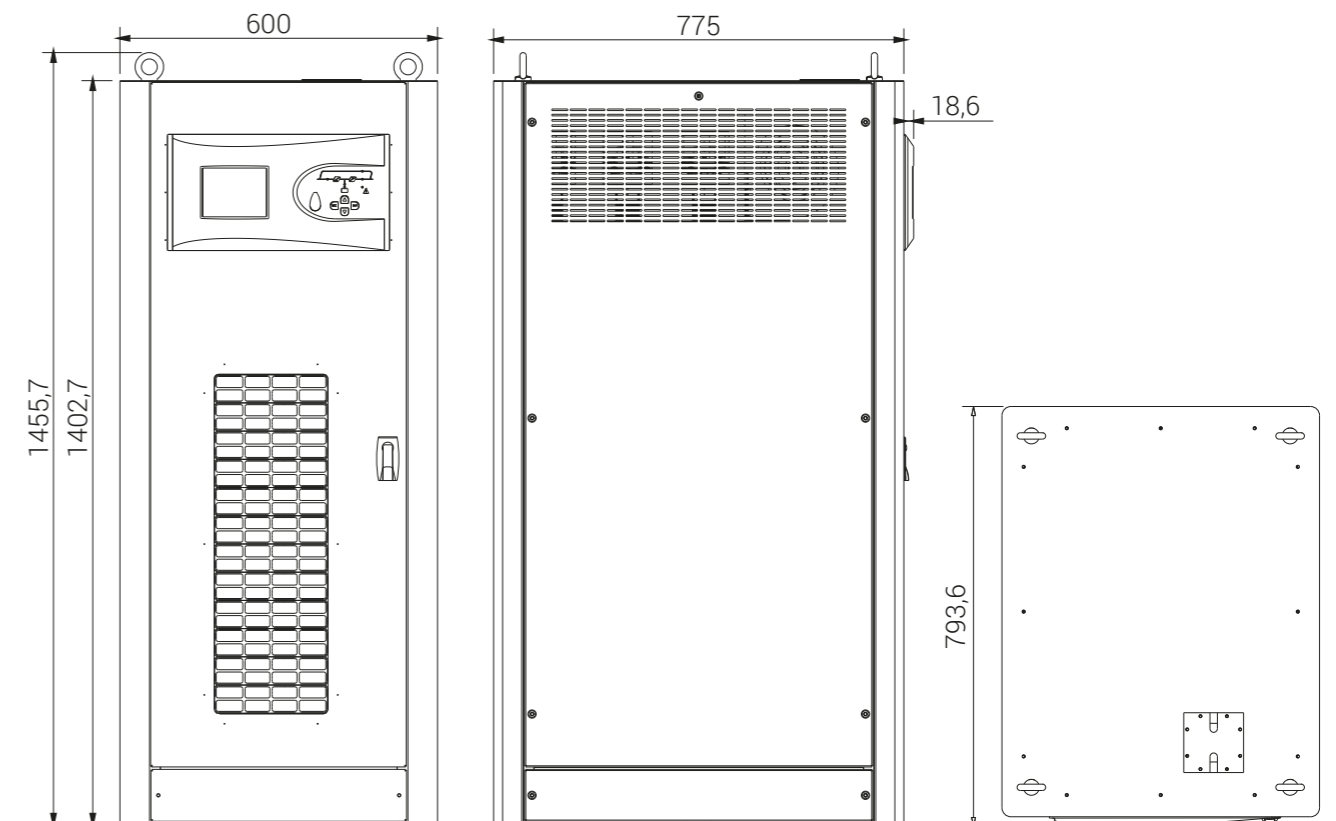
- IGBT Rectifier and Inverter Technology
- Output Power Factor 0.9 (Optional1)
- DSP Control
- Ultra High Efficiency up to 96%
- Low Input Current THD (<3%)
- High Input Power Factor (>0,99)
- Frequency Range 40-70Hz
- Auto- Ranging /Multi-Voltage Input (180-520V)
- Seamless Power Transfer Between Converter and Generator
- RFI protection to prevent on board and shore supply disturbances
- Overload and Short Circuit Protection
- Paralell Operation (Up to 8)
- 1000 Real Time Event Log With Detailed Parameters

- Front Access for Easy Maintenance
- Advanced User Interface
- Excellent Generator Compability
- EPO (Emergency Shutdown)
- Galvanic Isolation
- Auto Restart
- Short MTTR (Average Repair Period)
- Backfeed Protection

Options

- Output Power Factor 1
- Reactor Transformer (Capacitive Kit)
- Manual Maintenance ByPass
- 115V , 690V 50-60Hz Output Voltage
- Horizontal Enclosure Design
- Remote Panel
- Dry Contact, SNMP Card

Structure



Benefits



Maximum Reliable Power
Isolation from Unreliable Shore supply, Clean energy to on-board equipments



Worldwide Operation
Connection to any worldwide shore supply



Better Working Conditions
No Noise
No Vibration



Save Environment
Reduced emissions and air pollution