

# HyREI

## 1-phase | Small



HyREI - Hybrid Renewable Energy Island - is an Efficient and Smart Stand-alone Converter thought to manage YOUR energy with greater flexibility, savings and availability 24h.

HyREI Small is high reliable and scalable converter for off-grid and grid-supported applications. It can satisfy the energy demand, partial or total, of small energy users (housing, pumps, telecom sites, ...).



Up to 90%  
consumption saving



24h  
availability



optimized  
management



Transition from  
National Grid to Battery  
without interruption



voltage  
stabilization



modular  
cases



self-learning  
system



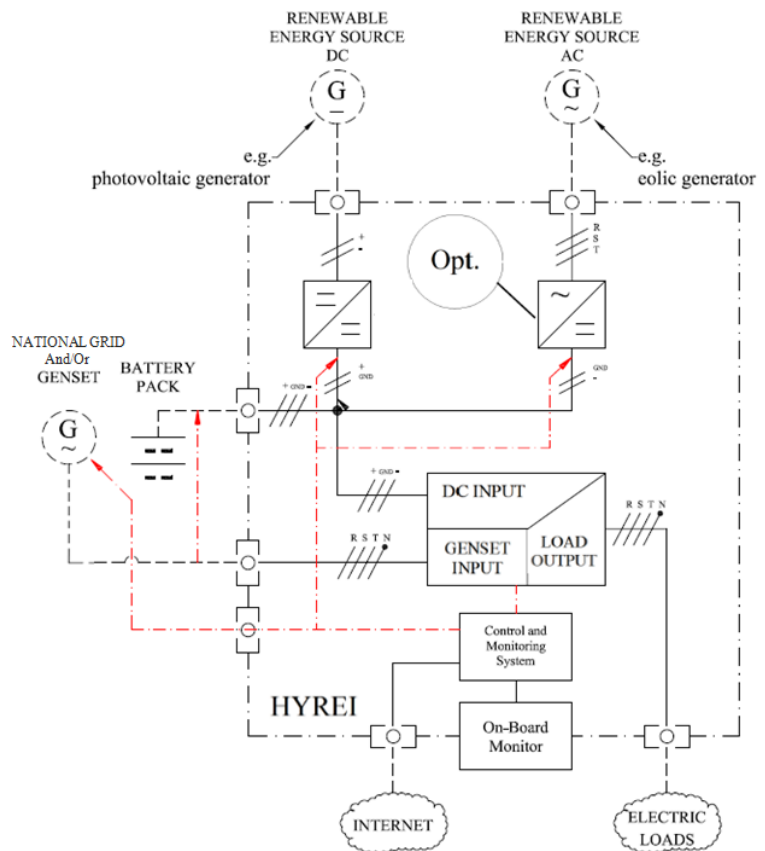
simultaneous use  
renewable energy sources

# HyREI

1-phase

# Small

- ✓ Off-grid/Grid-supported application
- ✓ Storage-based
- ✓ All in one (converter + solar charge regulator + control system)
- ✓ Modular and scalable
- ✓ Easy generator coupling
- ✓ Easy Grid/Genset coupling
- ✓ Remote monitoring system
- ✓ Two system autonomy models: Basic (B) and Endurance (E)
- ✓ Wind, Hydro and Fuel Cells optional energy sources



HyREI Small

# HyREI

## Small

# S-3-3-B

### Technical Data

SOLAR CHARGE CONTROLLER DATA (DC)		CONVERTER AC OUTPUT	
Rated PV Power kW (suggested)	3	Nominal Power kW	3
Maximum PV power kW	4.8	Connection type	1-ph 240V±10% 50Hz
N. charge regulators	2	Waveform	Pure sine
Voc	72/86.4	Nominal efficiency pv mode	85%
Vmpp	57.6/72	Nominal efficiency grid/genset mode	95%
Rated Charging Current A	50	Bypass genset-PV	Auto and manual
Max Charging Current A	≤75	COMMUNICATION AND CONTROL	
Rated Battery Voltage V	48	Display	LCD
Battery Bank Capacity Ah (suggested)	220	Communication	RS485

### GENERAL DATA

Dimensions (H x W x D mm)	600.0 x 600.0 x 300.0
Weight (kg)	40
Working temperature	-10°C ÷ +40°C
Altitude	- Till to 1000 above sea level; - Besides 1000 m power reduction of 1% 100m.
Humidity (without condensation)	0-95% in condensation absence

### PROTECTIONS

Protection class	IP 40
Cooling	air cooled

### ACCESSORIES

Remote Loads control	Optional
PowerBox Monitoring System	Optional
Smart Manager Grid/Genset	Optional
Genset Driver	Optional

### General Data

Last Review: 01/2016

# HyREI

## Small

# S-6-3-E

### Technical Data

SOLAR CHARGE CONTROLLER DATA (DC)		CONVERTER AC OUTPUT	
Rated PV Power kW (suggested)	6	Nominal Power kW	3
Maximum PV power kW	7.2	Connection type	1-ph 240V±10% 50Hz
N. charge regulators	2	Waveform	Pure sine
Voc	72/86.4	Nominal efficiency pv mode	85%
Vmpp	57.6/72	Nominal efficiency grid/genset mode	95%
Rated Charging Current A	75	Bypass genset-PV	Auto and manual
Max Charging Current A	≤100	COMMUNICATION AND CONTROL	
Rated Battery Voltage V	48	Display	LCD
Battery Bank Capacity Ah (suggested)	440	Communication	RS485

### GENERAL DATA

Dimensions (H x W x D mm)	800.0 x 600.0 x 600.0
Weight (kg)	55
Working temperature	-10°C ÷ +40°C
Altitude	- Till to 1000 above sea level; - Besides 1000 m power reduction of 1% 100m.
Humidity (without condensation)	0-95% in condensation absence

### PROTECTIONS

Protection class	IP 40
Cooling	air cooled

### ACCESSORIES

Remote Loads control	Optional
PowerBox Monitoring System	Optional
Smart Manager Grid/Genset	Optional
Genset Driver	Optional

### General Data

Last Review: 01/2016

# HyREI

## Small

# S-5-5-B

## Technical Data

SOLAR CHARGE CONTROLLER DATA (DC)		CONVERTER AC OUTPUT	
Rated PV Power kW (suggested)	5	Nominal Power kVA	5
Maximum PV power kW	7.2	Connection type	1-ph 240V±10% 50Hz
N. charge regulators	1	Waveform	Pure sine
Voc	360/432	Nominal efficiency pv mode	85%
Vmpp	288/360	Nominal efficiency grid/genset mode	95%
Rated Charging Current A	30	Bypass genset-PV	Auto and manual
Max Charging Current A	≤45	COMMUNICATION AND CONTROL	
Rated Battery Voltage V	240	Display	LCD
Battery Bank Capacity Ah (suggested)	100	Communication	RS485

## GENERAL DATA

Dimensions (H x W x D mm)	800.0 x 600.0 x 600.0
Weight (kg)	50
Working temperature	-10°C ÷ +40°C
Altitude	- Till to 1000 above sea level; - Besides 1000 m power reduction of 1% 100m.
Humidity (without condensation)	0-95% in condensation absence

## PROTECTIONS

Protection class	IP 40
Cooling	air cooled

## ACCESSORIES

Remote Loads control	Optional
PowerBox Monitoring System	Optional
Smart Manager Grid/Genset	Optional
Genset Driver	Optional

Last Review: 01/2016

## General Data

# HyREI

## Small

# S-10-5-E

### Technical Data

SOLAR CHARGE CONTROLLER DATA (DC)	
Rated PV Power kW (suggested)	10
Maximum PV power kW	14.4
N. charge regulators	2
Voc	360/432
Vmpp	288/360
Rated Charging Current A	30
Max Charging Current A	≤45
Rated Battery Voltage V	240
Battery Bank Capacity Ah (suggested)	200

CONVERTER AC OUTPUT	
Nominal Power kVA	5
Connection type	1-ph 240V±10% 50Hz
Waveform	Pure sine
Nominal efficiency pv mode	85%
Nominal efficiency grid/genset mode	95%
Bypass genset-PV	Auto and manual
COMMUNICATION AND CONTROL	
Display	LCD
Communication	RS485

### GENERAL DATA

Dimensions (H x W x D mm)	800.0 x 600.0 x 600.0
Weight (kg)	65
Working temperature	-10°C ÷ +40°C
Altitude	- Till to 1000 above sea level; - Besides 1000 m power reduction of 1% 100m.
Humidity (without condensation)	0-95% in condensation absence

### PROTECTIONS

Protection class	IP 40
Cooling	air cooled

### ACCESSORIES

Remote Loads control	Optional
PowerBox Monitoring System	Optional
Smart Manager Grid/Genset	Optional
Genset Driver	Optional

### General Data

Last Review: 01/2016

# HyREI

## Small

# S-10-10-B

## Technical Data

SOLAR CHARGE CONTROLLER DATA (DC)		CONVERTER AC OUTPUT	
Rated PV Power kW (suggested)	10	Nominal Power kVA	10
Maximum PV power kW	12	Connection type	1-ph 240V±10% 50Hz
N. charge regulators	1	Waveform	Pure sine
Voc	360/432	Nominal efficiency pv mode	85%
Vmpp	288/360	Nominal efficiency grid/genset mode	95%
Rated Charging Current A	50	Bypass genset-PV	Auto and manual
Max Charging Current A	≤75	COMMUNICATION AND CONTROL	
Rated Battery Voltage V	240	Display	LCD
Battery Bank Capacity Ah (suggested)	200	Communication	RS485

## GENERAL DATA

Dimensions (H x W x D mm)	1200.0 x 800.0 x 600.0
Weight (kg)	60
Working temperature	-10°C ÷ +40°C
Altitude	- Till to 1000 above sea level; - Besides 1000 m power reduction of 1% 100m.
Humidity (without condensation)	0-95% in condensation absence

## PROTECTIONS

Protection class	IP 40
Cooling	air cooled

## ACCESSORIES

Remote Loads control	Optional
PowerBox Monitoring System	Optional
Smart Manager Grid/Genset	Optional
Genset Driver	Optional

## General Data

Last Review: 01/2016

# HyREI

## Small

# S-20-10-E

Technical Data

SOLAR CHARGE CONTROLLER DATA (DC)	
Rated PV Power kW (suggested)	20
Maximum PV power kW	25
N. charge regulators	2
Voc	360/432
Vmpp	288/360
Rated Charging Current A	50
Max Charging Current A	≤75
Rated Battery Voltage V	240
Battery Bank Capacity Ah (suggested)	400

CONVERTER AC OUTPUT	
Nominal Power kVA	10
Connection type	1-ph 240V±10% 50Hz
Waveform	Pure sine
Nominal efficiency pv mode	85%
Nominal efficiency grid/genset mode	95%
Bypass genset-PV	Auto and manual
COMMUNICATION AND CONTROL	
Display	LCD
Communication	RS485

GENERAL DATA	
Dimensions (H x W x D mm)	1200.0 x 800.0 x 600.0
Weight (kg)	75
Working temperature	-10°C ÷ +40°C
Altitude	- Till to 1000 above sea level; - Besides 1000 m power reduction of 1% 100m.
Humidity (without condensation)	0-95% in condensation absence

PROTECTIONS	
Protection class	IP 40
Cooling	air cooled

ACCESSORIES	
Remote Loads control	Optional
PowerBox Monitoring System	Optional
Smart Manager Grid/Genset	Optional
Genset Driver	Optional

General Data

Last Review: 01/2016