## ESSM 48Vdc/IR180

# 48Vdc Energy Storage System & Monitoring with internal rectifier



- > Nominal output 30A on grid
- Universal 120V to 240V single AC input
- ➤ Up to 680A during 10s
- > 93% efficiency and 99% power factor correction
- ➤ Maintenance-free / Easy installation
- > Embedded diagnosis in real-time
- > Safe and Reliable Lithium technology
- > 10 years lifetime

### ESSM systems bring advanced technology to the UPS technology.

The ESSM 48Vdc/IR180 comes complete with distribution, controller and battery packs. With a maximum of 1.5kW output power, it is an ideal solution to meet the needs of uninterruptible power systems.

Remote setup, adjustment and control are simple with the ESSM controller. By utilizing TCP/IP technology, complete configuration and monitoring of power equipment is possible through a network web browser.



#### ESSM 48Vdc/IR180

### 48Vdc Energy Storage System & Monitoring with internal rectifier

P/N: ESSM48V\_IR180



**ELECTRICAL** 

**Input voltage:** 90 to 264 Vac (output power 1500W)

with derating: 90 to 150 Vac (output power 1000W)

**Input frequency:** 45 to 65 Hz

Power factor: > 0,99 Efficiency: 0,93

Output voltage: 36 to 50,4 Vdc

Output current: 30A on grid, up to 680A during 10s

**Load regulation:** Static < 0,05%

Dynamic < 0,15%

2ms recovery time

**Line regulation:** Static < 0,02%

Dynamic < 0,05% 2 ms recovery time

Ripple: < 10mVpp (@ BWL 20MHz)

< 4mVRMS (@ BWL 20MHz)

Capacity: 8,064 kWh

**PERFORMANCE / FEATURES** 

Indicators: Display TFT 4,3 inches

**Cooling:** Natural convection (Battery packs)

Fans (Power Control Unit)

Controls / Adjustments: Float and equalize voltage

Battery test voltage

High and low voltage alarms

High and low voltage shutdown

**Current limit** 

**Protection:** Current limit / short circuit

Input / output fuses

Output high and low voltage

shutdown

Output power limit Input transient

**Communication:** Supervision through web browser

**MECHANICAL** 

**Dimensions:** 

Power Control Unit: 600 x 560 x 400 mm

Battery pack: 660 x 240 x 340 mm

Weight:

Power Control Unit: 35 kg

Battery packs: 2 x 45 kg

**ENVIRONMENTAL** 

Temperature:

Operation: 0 to 40°C

Storage: -20 to 45°C

Humidity: < 80%

Elevation: -500 to 2000m

**AGENCY COMPLIANCE** 

The ESSM48V\_IR180 is designed to meet the following:

Safety: CSA C22.2 No 60950-1-03

UL 60950-1 1st edition

CE marked

IEC/EN 60950-1

IEC 62619

UN 38.3

IEC/EN 62133

EMC: ETSI 300 386
Emissions: EN 55022 Class B

EN 61000-3

Immunity: EN 61000-4

ELECSYS FRANCE®

453, Rue du Breuil - Technoland - 25460 Etupes - France

Email: info@elecsys-france.com

Tel: +33 9 53 33 30 25 Fax: +33 9 58 33 30 25

www.elecsys-france.com