







## MULTIDIRECTIONAL POWER CONVERTER **SIERRA 25 48/230**

**CNVCETSIERRA25** 

#### INTRODUCTION

This Subrack System is an all-in-one solution including the Sierra 25 - 48/230 power converters and Inview S monitoring in only 6U high. The system is single-phase and designed for 48 Vdc (DC loads & batteries) and 230 Vac (grid & AC loads) infrastructures in N+1 configuration. The solution is modular: you can start with a single module (2.7 kW) and increase, according to your needs, up to 8.1 kW.

#### **TECHNOLOGY**

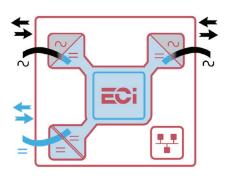
Sierra is the world's first fully bidirectional power

The three ports (two AC and one DC) built into each module can all function as input and output. This means that you can use it to secure AC & DC loads and charge batteries at the same time.

Sierra is also the right choice for energy management applications such as grid reinjection, peak shavings, phase balancing or innovative solutions based on energy sharing via a DC distribution.

#### **HOW IT WORKS?**

At the heart of each module, there is a DC energy buffer. It uses the energy that comes, whatever its source, to feed what needs it. The total output power is shared live between the loads and the batteries. It's that simple! No configuration is required.





#### Includes:

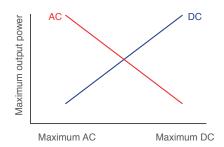




Sierra 25 - 48/230

Inview S - Monitoring

#### Live Power Sharing



### **KEY FEATURES**

- Secure AC & DC loads
- Modular (2.7 to 8.1 kW in N +1)
- High power density (only 6U high)
- Hot-swappable capacity
- Compact, easy to install and operate
- User-friendly monitoring
- EMC/EMI compliance

# MULTIDIRECTIONAL POWER CONVERTER SIERRA 25 48/230



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SPECIFICATIONS	2.7 kW	5.4 kW	8.1 kW
General			
Ingress Protection		IP20	
Cooling	Forced cooling		
Operating T°	-20 to 60°C derating from 40 to 60°C		
Number of Modules	1 + 1 Redundancy	2 + 1 Redundancy	3 + 1 Redundancy
Power			
AC Input Data			
Voltage range AC	150 to 265 Vac L-N single phase		
Nominal current @100% load and 230VAC	11.7 A	23.4 A	35.1 A
Frequency		47-53Hz / 57-63Hz	
Power factor	>0.99		
DC Input Data (Battery)			
Nominal voltage (range)	48 Vdc (40 - 60 Vdc)		
Nominal current at 48 Vdc	54.4 A	108.8 A	163.2 A
Maximum current (for 15 seconds)	67.9 A	135.8	203.7
Battery breaker		2 x 125 A for 2 string	
AC Output Data			
Voltage range AC out	220-240 Vac L-N single phase adjustable		
Output Power	3 kVA / 2.4 kW	6 kVA / 4.8 kW	9 kVA / 7.2 kW
Frequency		50Hz , 60 Hz ±0.1%	
AC output breaker	2 x 16A 1P		
DC Output Data (Battery)			
Nominal voltage (range)	53.5 Vdc (44 - 60 Vdc)		
Maximum power	2.4 kW	4.8 kW	7.2 kW
Maximum current at 48 Vdc	50 A	100 A	150 A
Battery breaker		2 x 125A for 2 String	
Recharge time for 30 min backup @ 100% load	6 to 8 hours for 80% battery capacity		
Signaling & Supervision			
Display	Synoptic LED on Modules and 2.8" touch screen in Inview S		
Supervision	Inview S		
Communication	ETH, SNMP, MODBUS over IP		
Alarm relay	Form C dry contact Major + Minor + 6 relay con gurable		
System			
Width x Height x Depth	19 Inch x 6U x 520 mm		
Weight without modules	23 kg		
Safety & EMC			
Safety	EN/IEC 62040-1		
EMC	EN/IEC 62040-2		
Performances	EN/IEC 62040-3		

Latpower reserves the right to change product specifications and design without notice.

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