CE+T POWER

Leading Conversion Technology for Power Resilience

Subrack System
Sierra 25 – 48/230

ECi technology inside
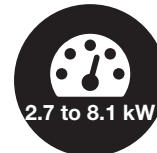

Secure AC and DC loads with a single module.
The most flexible integrated solution for loads from 2.7 to 8.1 kW (N+1).

📞 Telecom   🗄 Datacom   🚆 Mass transport   🏭 Industry   ⚡ Power Utilities   🔻 Renewable

AC In
230 Vac

DC In
48 Vdc

AC Out
230 Vac

DC Out
48 Vdc

2.7 to 8.1 kW

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**.
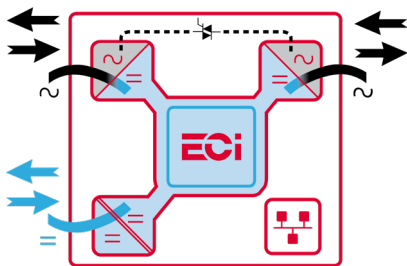
Technology

Sierra is the world's first **fully bidirectional** power converter.

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.

Includes:

Sierra 25 - 48/230
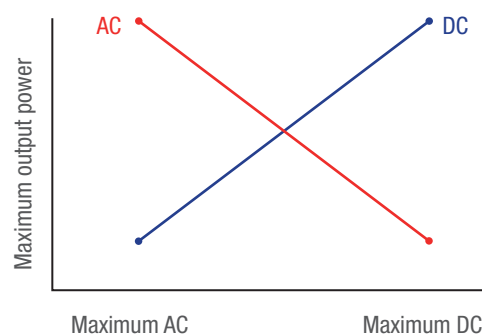
Inview S - Monitoring

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.

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
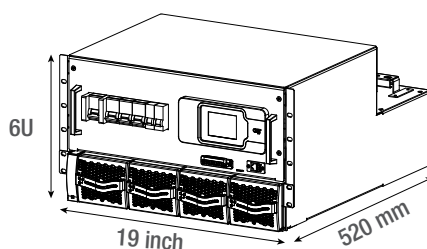- User-friendly monitoring
- EMC/EMI compliance

Live Power Sharing

Illustrations are non-binding and may include customized fittings.

Subrack System - Sierra 25 – 48/230

	2.7 kW	5.4 kW	8.1 kW
General			
Part Number	S72P73E0204S2000J001	S72P73E0304S2000J001	S72P73E0404S2000J001
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 configurable		
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		

6U

19 inch

520 mm

Subrack System – Sierra 25 – 48/230 - Datasheet - v2.1. Specifications can change without notice. New data will be updated on our website: www.cet-power.com.
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