



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 5U 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.

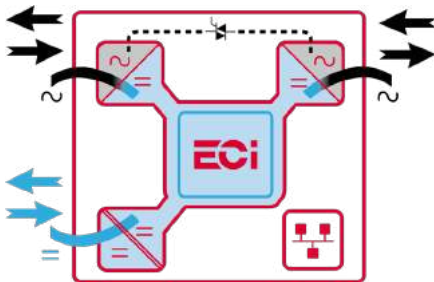
Includes:



Sierra 25 - 48/230



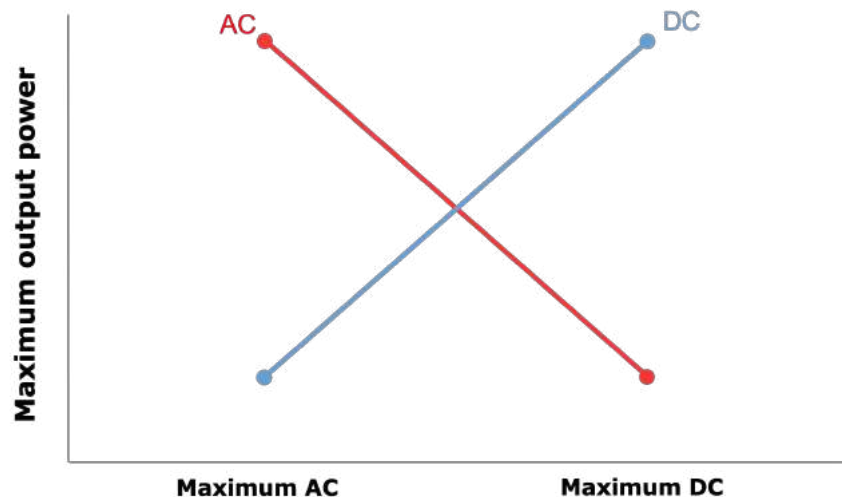
Inview S - Monitoring



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.

Live Power Sharing



Key features:

- Secure AC & DC loads
- Modular (2.7 to 8.1 kW in N+1)
- High power density (only 5U high)
- Hot-swappable capacity
- Compact, easy to install and operate
- User-friendly monitoring
- EMC/EMI compliance

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 + 40°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 5U x 520 mm | | |
| Weight without modules | 23 kg | | |
| Safety & EMC | | | |
| Safety | EN/IEC 62040-1 | | |
| EMC | EN/IEC 62040-2 | | |
| Performances | EN/ IEC62040-3 | | |

