
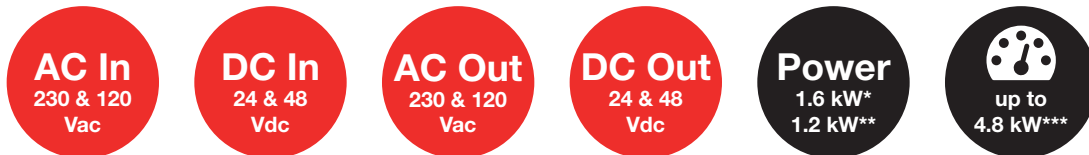




Designed for eXtreme Conditions, Sierra is the world's first multidirectional power converter. This solution offers many new features within a unique module!

 Telecom
  Datacom
  Mass transport
  Industry
  Power Utilities
  Renewable



\* 230 Vac  
\*\* 120 Vac

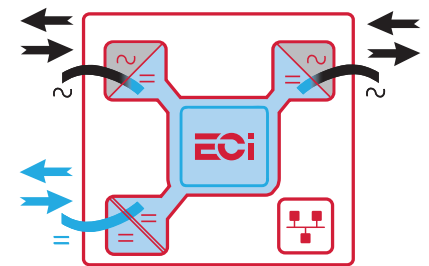
\*\*\* Using 3 modules and a junction kit

## Designed to Withstand!

Built for **harsh environments**, Sierra XC 16 fears nothing: earthquake, vibration, shock, high temperature, humidity, water projection, dust, corrosive atmosphere, biologic and chemical contamination. The product is delivered in an IP65.

## Technology

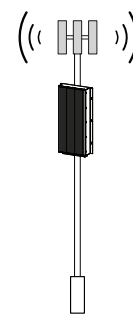
The **three fully bidirectional ports** (AC/AC/DC) built into each module can all function as **input** and **output**. This means you can use it to **secure AC & DC loads** and charge the **batteries** at the same time. The internal DC energy buffer dynamically distribute the power between AC and DC according the needs. No configuration is required.



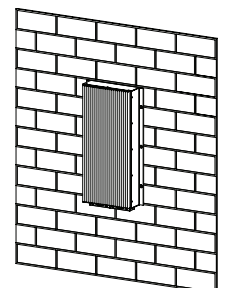
## To do what?

This unique power converter can be used to power any type of load anywhere:

- **Outdoor (pole or wall mounted):**
  - Telecom antenna
  - Traffic lighting
  - Security camera / CCTV
  - Offshore wind farms
- **Onboard:**
  - Outside broadcast
  - Transport (train, boats, etc.)
  - Military



Pole mount



Wall mount

Just to name a few. For any kind of application in extreme conditions, Sierra XC is your partner of choice.

## Versions

The Sierra XC 16 can be configured in two different ways:

- Sierra XC 16 - 24: for **24 Vdc**.
- Sierra XC 16 - 48: for **48 Vdc**.

The Sierra XC 16 can be configured in **parallel** to **increase the output power**.

For smaller loads, discover Sierra XC 10.

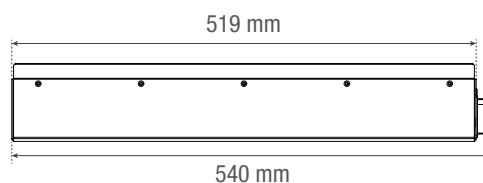
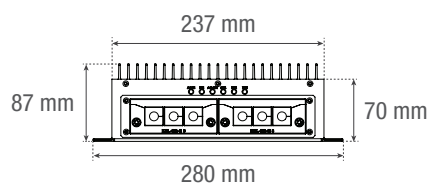
Illustrations are non-binding and may include customized fittings.

### Key features:

- Secure AC & DC loads
- Harsh Environment (IP65)
- Onboard and Outdoor applications
- Compact, easy to install and operate

# Sierra XC 16 - 24 and Sierra XC 16 - 48

	Sierra XC 16 - 24	Sierra XC 16 - 48
<b>General</b>		
Part Number	T731720201	T731730201
Cooling	Natural convection	
MTBF	200 000 hrs (MIL-217F)	
Dielectric strength DC/AC	4300 Vdc	
RoHS / Material (casing)	Compliant / ZnNi powder coated & Aluminium	
Operating T° / Relative Humidity	Compliant to ETSI 300-019-1-4 class 4.1E -40°C to +70°C derating above 50°C / 0-100%	
Storage T° / Relative Humidity	Compliant to ETSI 300-019-2-4 class 4.1E -40°C to +70°C / 0 to 100%	
Shock & Vibration	Design for on board vehicles and ship	
Altitude above sea without de-rating of power	< 1500 m / derating > 1500 m – 0.8 % per 100 m / max 4000 m	
<b>Power</b>		
<b>AC Input Data</b>		
Nominal voltage (AC) / Current	230 Vac / 7.2 A	
Voltage range (AC)	90 - 295 Vac (derating below 125 Vac)	
Brownout	900 W @ 90 Vac and 1600 W at 125 Vac linear decreasing	
Power factor / THD	> 99% / < 3%	
Frequency range (selectable) / synchronization range	50 Hz (range 47 – 53 Hz) / 60 Hz (range 57 – 63 Hz)	
<b>DC Input Data</b>		
DC voltage: Nominal / range	24 Vdc / (16 - 32V)	48 Vdc / (40 - 61V)
Nominal current (at 1600 W output)	72 A	36 A
Maximum input current (for 15 second) / voltage ripple	80 A @ 22 Vdc/ < 10 mV RMS	45 A @ 40 Vdc/ < 10 mV RMS
<b>AC Output Data</b>		
Efficiency AC to AC / DC to AC	96% / 93%	
Nominal voltage AC (Adjustable)	230 Vac (100 - 240 Vac) <sup>1</sup>	
Frequency / frequency accuracy	50 or 60 Hz / 0.03%	
Nominal Output power (VA) / (W)	2000 VA / 1600 W @230 Vac, 1500 VA / 1200 W @120 Vac	
Short time overload capacity	150% (15 seconds)	
Admissible load power factor	Full power rating from 0 inductive to 0 capacitive	
Total harmonic distortion (resistive load)	< 3%	
Load impact recovery time (10% - 90%)	≤ 0.4 ms	
Nominal current	8.7 A @ 230 Vac, 12.5 A @ 120 Vac	
Crest factor at nominal power	3 : 1 for load P.F. ≤ 0.7	
Short circuit current	22.5 A for 15 seconds	
AC output voltage stability	±1% from 10% to 100% load	
<b>DC Output Data</b>		
Efficiency AC to DC	> 93%	
Nominal voltage (Adjustable)	26.5 Vdc (16 - 32 Vdc)	53.5 Vdc (44 - 61 Vdc)
Maximum power	1600 W	
Maximum current	67 A @ 24 Vdc	33.3 A @ 48 Vdc
Reverse polarity protection	YES	
<b>In Transfer Performance</b>		
Max. Voltage interruption / total transient voltage duration (max)	0 sec / 0 sec	
<b>Signaling &amp; Supervision</b>		
Monitoring device	Inview GW Rack with IP 65 (optional)	
<b>Safety &amp; EMC</b>		
Safety	EN62040-1	
EMC	EN 61000-4-2 / EN 61000-4-3 / EN 61000-4-4 / EN 61000-4-5 / EN 61000-4-6 / EN 61000-4-8 ETSI EN 300386 v1.9.1	



Weight: ~13 kg

<sup>1</sup> Output power varies depending upon the selected voltage.