

The Centrio™ Solar Inverter Series

E2L™

P142E



High Reliability, Grid-Connected, Field-Ready, Three phase Inverters from 50KW to 630KW

The Centrio™ Solar Inverter Series is an industrial grade, compact, grid-connected, solar inverter providing a staggering efficiency. The Centrio is conceived with internal redundancies to provide maximum reliability under harsh ambient conditions. Optional MV Modules are available for seamless integration with the grid.

It is of course possible to connect an unlimited number of inverters to meet the required power plants size. Inverters are available with or without galvanic isolation.

The Centrio™ Solar Inverter Series

Achieve superior performance, higher rates of return and a lower total cost of ownership, for the entire life-span of your system.

E24 inverters maximize array performance and uptime through a combination of system intelligence, advanced command and control capabilities, industrial-grade engineering, and total life cycle performance optimization.

E24 offers the industry's most comprehensive preventative maintenance and extended warranty plans, including our 99% Uptime Guarantee. Our international organization is dedicated to ensuring that each E24 solution performs with the highest levels of efficiency and reliability throughout its entire life-span. All of these benefits combine to deliver the highest levels of system performance that you can depend on.

E24 Solar inverters maximize system uptime and power production, even in cloudy conditions, due to their advanced system intelligence, next-generation Edge™ MPPT technology, and industrial-grade engineering.

Unparalleled Performance With 5 power ratings ranging from 50 kW to 630 kW

E24 offers a wide range of solar PV inverter solutions, enabling you to closely match array capacities and achieve maximum energy throughput.

Smart MPPT Energy Harvesting Technology

- Features a proprietary maximum power point tracking (MPPT) system
- Provides rapid and accurate control
- Boosts overall PV plant kilowatt yield
- Provides a wide range of operation across all photovoltaic cell technologies, including thin film, mono-crystalline, and poly-crystalline PV panels.

Power and Efficiency Ratings

- Five power ratings, ranging from 50 kW to 630 kW (CE certified)
- CEC efficiency rating:
97% to 98% (without transformer)
96% to 97% (with transformer)
- CE efficiency rating:
97% to 98% (without transformer)
- Ambient temperature range:
20 degrees C (-4 deg. F) to +55 degrees C (131 deg. F)

The E24 Centrio™ series delivers the industry's first mobile field ready, grid connect ready, outdoor solar inverter speeding up the deployment and upgrade of utility class solar power plants.

The Centrio™ series enables centralized, intelligent management of the entire PV system along with the flexibility of localized control over every component in the array, from the panel, to a single string, to the inverter, to the grid – thus serving as a total system solution.

The Centrio™ series delivers best in class 98.7% peak efficiency combined with the industry's widest thermal operating range with Superior dynamic performance in cloudy conditions

DC Inputs at Full Power

- 420V DC to 850V DC (CE)

Printed Circuit Board Durability

- Wide thermal operating range:
-40° C (-40° F) to 85° C (185° F)
- Conformal coated to withstand extreme humidity and air-pollution levels.



String Level Monitoring

The PV Distribution Box, is a smart sub-combiner that may accommodate up to 12 PV strings and features comprehensive diagnostic capabilities that identify string-level performance issues with remarkable speed and accuracy.

Total system monitoring,

- Diagnostics and control provides greater visibility to poorly behaving elements in the system at the string level.
- Bidirectional communication allows you to stop, start and restart a solar PV power plant remotely, and receive status updates from the inverter. It also provides the ability to sense, identify and mitigate ground faults as they occur - in milliseconds.
- A number of accessories and monitoring tools are available to provide you with day to day information about your power plant anytime anywhere.

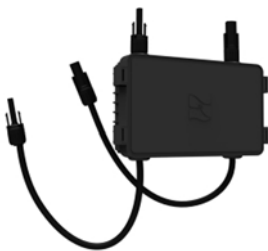
Options¹ for the Centrio™ Solar Inverter Series



Total System Intelligence and Control

E24 Offers a number of local or web based software allowing to retrieve information about the operation of the utility tied photo voltaic system from anywhere in the world.

The tool provides current and historical data of the solar system parameters and notifies customers of any abnormalities.



Module Data Logger

Module-level Data Logger is an innovative monitoring device which can directly connect to the junction box of solar module, with the simple “plug & play” function to provide accurate and real time data about the performance of the PV system up to individual panel level.

Optional Weather Station

With the optional weather station, it becomes possible to view site specific information useful for calculating expected system performance, including:

- Irradiance
- Wind speed
- Wind direction
- Ambient temperature
- Photo voltaic cell
- Temperature



¹ Refer to E24 Brochure # 519 - Monitoring Tools and Accessories for PV systems

Technical Specifications (units without Isolation Transformer)

Item Reference	SIC3-50KI	SIC3-100KI	SIC3-250KI	SIC3-500KI	SIC3-630KI
INPUT					
Max. DC input power	55KW	110KW	275KW	550KW	690KW
Max. DC input voltage	900Vdc				
MPPT tracking voltage range	450~850Vdc (Rated voltage 576Vdc)				
Number of MPPT tracking	1				
Max. input current	120A	240A	600A	1200A	1440A
OUTPUT					
Rated output power	50KW	100KW	250KW	500KW	630KW
Rated output voltage	400Vac				
AC output topology	3Ph+PE				
Output voltage range	(1±15%) x Normal AC voltage (adjustable ±5%, ±10%, ±15%, ±20%)				
Grid frequency range	50/60Hz(±4.5Hz), (adjustable)				
Rated AC output current	72A	144A	361A	722A	909A
Max. AC output current	79A	158A	397A	794A	1000A
Power factor (cos θ)	1 (0.9 leading-0.9 lagging) (adjustable)				
Total harmonic current distortion (THDi)	<3%				
SYSTEM FEATURES					
Max. efficiency	>98.0%	>98.0%	>98.3%	>98.7%	>98.7%
Euro efficiency	>97.6%	>97.6%	>97.8%	>98.2%	>98.2%
MPPT efficiency	>99%				
Standby (night time) losses	<10W				
Cooling	Forced air cooling				
Communication interface	RS485, external Ethernet (optional)				
ENVIRONMENTAL					
Operating temperature	-40 ⁰ C~55 ⁰ C				
Humidity range	0~95%(non-condensing)				
Altitude	3000m				
Nose level	<58dB	<58dB	<60dB	<60dB	<60dB
Protection rating	IP20				
PHYSICAL					
Dimension WxHxD (mm)	600x1600x945	835x1850x945	1200x1850x945	1600x1850x945	1600x1850x945
Net Weight (kg)	310	470	815	1350	1370
STANDARDS					
Safety	IEC/EN62109-1,IEC/EN62109-2,CNCA/CTS0004:2009A, CNCA/CTS0006-2010, LVRT, etc				
EMC	IEC/EN61000-6-2, IEC/EN61000-6-4,etc				

Technical Specifications (units with built-in Isolation Transformer)

Item Reference	SIC3-50KI	SIC3-100KI	SIC3-250KI	SIC3-500KI	SIC3-630KI
INPUT					
Max. DC input power	55KW	110KW	275KW	550KW	690KW
Max. DC input voltage	900Vdc				
MPPT tracking voltage range	450~850Vdc (Rated voltage 576Vdc)				
Number of MPPT tracking	1				
Max. input current	120A	240A	600A	1200A	1440A
OUTPUT					
Rated output power	50KW	100KW	250KW	500KW	630KW
Rated output voltage	400Vac				
AC output topology	3Ph+PE				
Output voltage range	(1±15%) x Normal AC voltage (adjustable ±5%, ±10%, ±15%, ±20%)				
Grid frequency range	50/60Hz(±4.5Hz), (adjustable)				
Rated AC output current	72A	144A	361A	722A	909A
Max. AC output current	79A	158A	397A	794A	1000A
Power factor (cos θ)	1 (0.9 leading-0.9 lagging) (adjustable)				
Total harmonic current distortion (THDi)	<3%				
SYSTEM FEATURES					
Max. efficiency	>97%	>97.5%	>97.6%	>98.1%	>98.1%
Euro efficiency	>96.5%	>96.9%	>97%	>97.6%	>97.6%
MPPT efficiency	>99%				
Standby (night time) losses	<10W				
Cooling	Forced air cooling				
Communication interface	RS485, external Ethernet (optional)				
ENVIRONMENTAL					
Operating temperature	-40 ⁰ C~55 ⁰ C				
Humidity range	0~95%(non-condensing)				
Altitude	3000m				
Nose level	<58dB	<58dB	<60dB	<60dB	<60dB
Protection rating	IP20				
PHYSICAL					
Dimension WxHxD (mm)	600x1600x945	835x1850x945	1200x1850x945	1600x1850x945	1600x1850x945
Net Weight (kg)	520	900	1470	2800	3150
STANDARDS					
Safety	IEC/EN62109-1,IEC/EN62109-2,CNCA/CTS0004:2009A, CNCA/CTS0006-2010, LVRT, etc				
EMC	IEC/EN61000-6-2, IEC/EN61000-6-4,etc				

PV Panels



PV Cabling Kits



PV Mounting Kits



PV Charge
Controllers



PV Inverter



PV Controllers



E24 Modular Range Of Products For Building Easy, Flexible & Evolutive Solutions

E24 products dynamically evolve with the lifestyle and work style of its customers while easing the installation process.

E24 products are conceived in modules allowing for an easy upgrade to adjust with the needs of the customers. Being modular and easy to connect E24 products allow installers to easily configure the required modules for an optimal solution while offering easy upgrade options.

E24



Ordering Information

Ref Number	Description
PVIC3-50KI	Centrio Grid Connected inverter, 1 MPP Tracker, 50KW, transformerless, 3Phase, 400/230V, 50/60Hz
PVIC3-50KTI	Centrio Grid Connected inverter, 1 MPP Tracker, 50KW, w/t isol. transformer, 3Phase, 400/230V, 50/60Hz
PVIC3-100KI	Centrio Grid Connected inverter, 1 MPP Tracker, 100KW, transformerless, 3Phase, 400/230V, 50/60Hz
PVIC3-100KTI	Centrio Grid Connected inverter, 1 MPP Tracker, 100KW, w/t isol. transformer, 3Phase, 400/230V, 50/60Hz
PVIC3-250KI	Centrio Grid Connected inverter, 1 MPP Tracker, 250KW, transformerless, 3Phase, 400/230V, 50/60Hz
PVIC3-250KTI	Centrio Grid Connected inverter, 1 MPP Tracker, 250KW, w/t isol. transformer, 3Phase, 400/230V, 50/60Hz
PVIC3-500KI	Centrio Grid Connected inverter, 1 MPP Tracker, 500KW, transformerless, 3Phase, 400/230V, 50/60Hz
PVIC3-500KTI	Centrio Grid Connected inverter, 1 MPP Tracker, 500KW, w/t isol. transformer, 3Phase, 400/230V, 50/60Hz
PVIC3-630KI	Centrio Grid Connected inverter, 1 MPP Tracker, 630KW, transformerless, 3Phase, 400/230V, 50/60Hz
PVIC3-630KTI	Centrio Grid Connected inverter, 1 MPP Tracker, 630KW, w/t isol. transformer, 3Phase, 400/230V, 50/60Hz





REGIONAL SALES OFFICES

North America:

1250, Rene Levesque West, #2200
Montreal, Quebec,
Canada H3B 4W8
Phone: +1-514-9893700
Sales_R1@e24solutions.com

Europe:

20-22 Wenlock Road
London N1 7GU
United Kingdom
Phone: +44-2038242497
Sales_R4@e24solutions.com

Eurasia:

5th and 6th Floors,
14 Tsar Osvoboditel Blvd.,
1000 Sofia, Bulgaria
Phone: +359-2-811-1445
Sales_R5@e24solutions.com

Middle East & Africa:

May Tabet Building,
Sin El Fil
Beirut, Lebanon
Phone: +961-1-492705
Sales_R6@e24solutions.com

AUTHORIZED RESELLER



Get more info on www.e24solutions.com