E-RSZ12KW48V

EURONET GEN-5 RSZ SERIES INVERTER – 12kW

High-Efficiency Inverter | Dual AC Inputs



RATED POWER	MAX EFFICIENCY
12000W	97.50%
MAX PV INPUT POWER	**MAX SOLAR CHARGE**
14500W	230A
PARALLEL UNITS	**NIGHT NOISE LEVEL**
Up to 9	<40dB

OVERVIEW

The EURONET Gen-5 RSZ 12K (E-RSZ12KW48V) belongs to EURONET's most advanced residential inverter platform. It delivers 12000W at full load with 18000VA surge power on a 48V DC battery, and two independent MPPT inputs (18A + 18A) accept up to 14500W of solar across a 120V–480V DC range. Battery, solar and AC charging each reach 230A, and conversion efficiency is 97.50%. Dedicated mains and generator inputs switch automatically, up to 9 units run in parallel, noise stays below 40dB at night and Bluetooth allows set-up without a network.

KEY FEATURES

97.5% Conversion Efficiency
Max. conversion efficiency of 97.50% means less heat, lower losses and a longer service life for the unit

Dual AC Inputs
Dedicated mains and generator inputs with intelligent auto-switching and prioritisation between sources

Parallel Operation - 9 Units
Up to 9 identical units can run in parallel, in single-phase or three-phase system configurations

Smart Noise Control
Less than 50dB rated and less than 40dB at night, suitable for installations right next to bedrooms

Dual Independent MPPT
Two 18A MPPT channels, 14.5kW of PV capacity in total maximise yield from multi-orientation roof arrays

Bluetooth Direct-Connect
Commissioning and firmware upgrades over Bluetooth, with no internet or network access needed on site

TECHNICAL NOTE

RSZ 12K: 12000W (full load), surge 18000VA, 48V DC battery. Max. battery, solar and AC charging current 230A. PV: 120V–480V DC range, 480V DC max., 18A + 18A (Dual MPPT), 14500W max. input, full-load MPPT 340V–450V DC. Output 220 / 230 / 240V AC, 52.1A, PF >0.99; max. second load 8400W; efficiency 97.50%. Grid 184V–253V AC. IP20, -20°C to +65°C, CE / RoHS.

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E-RSZ12KW48V

PRODUCT TECHNICAL SPECIFICATIONS

PARAMETER	SPECIFICATIONS
GENERAL	
Model	E-RSZ12KW48V
Series	Gen-5 RSZ Series (RSZ 12K)
Product Type	High-efficiency residential inverter
Rated Power	12000W (full load)
Surge Power	18000VA
Max. Conversion Efficiency	97.50%
Parallel Operation	Up to 9 units, single- or three-phase
BATTERY	
Battery Voltage	48V DC
Max. Battery Current	230A
PV INPUT / SOLAR CHARGER	
MPPT Inputs	Dual independent MPPT
Nom. PV Operating Voltage	360V DC
Max. PV Voltage	480V DC
PV Input Voltage Range	120V–480V DC
Full-load MPPT Range	340V–450V DC
Max. PV Current	18A + 18A (Dual MPPT)
Max. PV Input Power	14500W
Max. Solar Charging Current	230A

PARAMETER	SPECIFICATIONS
GRID / AC INPUT	
AC Inputs	Mains and generator, auto-switching
Nominal AC Input Voltage	230V AC
Grid Voltage Range	184V–253V AC
Grid Frequency Range	47.5–51.5 / 57–62Hz
Max. AC Input Current	65A
Max. AC Charging Current	230A
AC OUTPUT	
Nominal Output Voltage	220 / 230 / 240V AC
Max. Main Load	12000W
Full Load	12000W
Nominal Output Current	52.1A
Power Factor	>0.99
Max. Second Load	8400W
COMMUNICATION	
Bluetooth	Direct-connect commissioning firmware upgrade
PHYSICAL & ENVIRONMENTAL	
Ingress Protection	IP20
Operating Temperature	-20°C to +65°C
Noise Level	<50dB rated · <40dB at night
Colour	Silver and black
Dimensions (W × H × D)	Not available
Net Weight	Not available
CERTIFICATION	
Certification	CE / RoHS
Test Conditions	Specifications at 25°C ambient unless stated

**Specifications are subject to change without prior notice.*

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