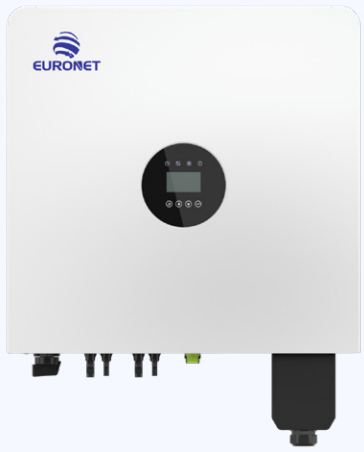
EU-OG/50KSF

EURONET ON-GRID STRING INVERTER – 50kW

Three-Phase C&I String Inverter | 4 MPPTs



RATED AC POWER **50000W**	MAX DC INPUT VOLTAGE **1100V**
MPPT VOLTAGE RANGE **200V–1000V**	MPPTS / STRING INPUTS **4 / 8**
MAX EFFICIENCY **98.5%**	PROTECTION CLASS **IP66**

OVERVIEW

The EURONET EU-OG/50KSF is a 50kW three-phase, transformerless string inverter for commercial and industrial rooftops such as offices, shopping centres and light industrial units. Four MPPTs with two strings each accept 32A per MPPT across a 200V–1000V range, with up to 1100V DC input and a DC/AC ratio of up to 1.5. It reaches 98.5% maximum efficiency (98.2% Euro), supports reactive power control and includes residual current monitoring and surge protection in a fan-cooled IP66 enclosure with RS-485 and Wi-Fi / 4G.

KEY FEATURES

Four MPPTs, Eight Strings
Four MPPTs with two strings each, 32A max. input and 48A max. short-circuit current on each MPPT

1100V Max. DC Input
200V–1000V MPPT range, 650V nominal and 250V start voltage for long high-power module strings

Reactive Power Control
Supports Q(U) and Q(P) grid regulation, with the power factor adjustable 0.8 leading – 0.8 lagging

Up to 98.5% Efficiency
98.5% maximum and 98.2% Euro efficiency, THDi below 3%, DC/AC ratio up to 1.5 for larger arrays

Built-In Protection
DC switch, anti-islanding, AC short-circuit and residual current monitoring, plus DC/AC surge SPD

Rugged IP66 Enclosure
548 × 540 × 289mm, 51kg, fan cooled, rated for -25°C to +60°C ambient and altitudes up to 4000m

TECHNICAL NOTE

50000W nominal / 55000VA max. AC output, 230/400V 3P+N+PE, 50/60Hz ±5Hz, max. output current 83.3A (@220V). PV input 1100V max., 650V nominal, 250V start, MPPT 200V–1000V, 4 MPPTs × 2 strings, 32A per MPPT, DC/AC ratio up to 1.5. 98.5% max. / 98.2% Euro efficiency. IP66, fan cooling, 51kg, 548 × 540 × 289mm, OT terminal. RS-485 / Wi-Fi / 4G, LCD display.

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EU-OG/50KSF

PRODUCT TECHNICAL SPECIFICATIONS

PARAMETER	SPECIFICATIONS
GENERAL	
Model	EU-OG/50KSF
Type	Three-phase on-grid string inverter
Topology	Transformerless
INPUT (DC)	
Max. DC Voltage	1100V
Nominal DC Voltage	650V
Start Voltage	250V
MPPT Voltage Range	200V–1000V
Number of MPPTs	4
Strings Per MPPT	2
Max. Input Current / MPPT	32A
Max. Short-circuit Current / MPPT	48A
Max. DC/AC Ratio	1.5
OUTPUT (AC)	
Nominal AC Output Power	50000W
Max. AC Apparent Power	55000VA
Nominal AC Voltage	230/400V, 3P+N+PE
Grid Frequency	50/60Hz ±5Hz
Max. Output Current	83.3A (@220V)
Power Factor (Cos φ)	0.8 leading – 0.8 lagging
THDi	<3%
EFFICIENCY	
Max. Efficiency	98.5%
Euro Efficiency	98.2%

PARAMETER	SPECIFICATIONS
PROTECTION	
DC Switch	Yes
Anti-islanding Protection	Yes
Output Over-current Protection	Yes
DC Reverse Polarity Protection	Yes
String Fault Detection	Optional
Residual Current Monitoring	Yes
AC Short-circuit Protection	Yes
DC / AC Surge Protection	DC Type II · AC Type III (Type II optional)
COMMUNICATION & DISPLAY	
Communication	RS-485 / Wi-Fi / 4G
Wi-Fi / 4G	Plug-in module, optional
Monitoring	Cloud via Wi-Fi / 4G SCADA via RS-485 Modbus
Grid Support	Reactive power control, Q(U) / Q(P)
Display	LCD
PHYSICAL & ENVIRONMENTAL	
Dimensions (W × H × D)	548 × 540 × 289 mm
Weight	51 kg
Cooling	Fan cooling
IP Class	IP66
Operating Temperature	-25°C to +60°C
Max. Operating Altitude	4000m
Max. Operating Humidity	0–100% (no condensation)
AC Output Terminal	OT terminal
CERTIFICATION & STANDARDS	
Safety	EN/IEC 62109-1 · EN/IEC 62109-2
Grid Connection	IEC 61727 · IEC 62116 · EN 50549-1
Grid Codes	NC RfG · VDE-AR-N-4105 · VDE 0126 CEI 0-21
EMC	IEC/EN 61000-6-1 · 61000-6-2 · 61000-6-3 61000-6-4
Environmental / Test	IEC 61683 · IEC 60068 · IEC 60529

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

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