

EURONET GEN 5 EDGE SERIES SOLAR HYBRID INVERTER - 12KW (LV Three-Phase)

12KW Three-Phase Output | Dual 48V Battery Input | IP65 Rated

The EURONET GEN 5 Edge Series 12KW is a three-phase hybrid inverter that converts solar energy into usable AC power while storing surplus energy in battery for later use. Built around a PV array, battery bank, connected loads and an electricity sensor, the system can prioritise self-consumption, hold energy in reserve, or export it to the public grid. With dual 48V battery ports, 2 independent MPPTs and IP65 protection, it is engineered for reliable indoor or outdoor installation.



6 KEY HIGHLIGHTS



Three-Phase Hybrid Output

Self-consumption, feed-in, back-up and off-grid modes on a 12KW three-phase output.



Dual Battery Input

Two 48V lithium-ion / lead-acid battery ports with up to 380A charge current.



2-MPPT Solar Charging

2 independent MPPTs across a 160V-980V tracking range for flexible PV strings.



Parallel Operation

CAN-based parallel connection lets multiple units scale capacity together.



IP65 Weatherproof Design

Sealed for indoor or outdoor mounting, rated -25°C to 60°C with smart cooling.



Full Communication & Protection Suite

RS485, CAN and DRM ports plus optional Wi-Fi/LAN, backed by GFCI, surge and anti-islanding protection.

INPUT (PV)

Max. PV Access Power	25000W	
Max. PV Usable Power	20000W	
Max. PV Input Voltage	1000V	
Start-up Voltage	120V	
MPPT Operating Voltage Range	160V-980V	
PV Rated Voltage	650V	DC
Max. Input Current per MPPT	20A/20A	
Max. Short Circuit Current per MPPT	30A/30A	
Nos. of MPPT	2	
String per MPPT	1/1	

INPUT/OUTPUT (BATTERY)

Battery Type	Lithium-ion / Lead-acid	
No. of Battery Input	2	Max charge/discharge limited to 190A if only one set of terminals used
Battery Rated Voltage	48V	
Battery Voltage Range	40V-60V	
Max. Charge/Discharge Current	380A / 300A	
Max. Charge/Discharge Power	20000W / 14500W	

OUTPUT (GRID)

Nominal AC Output Power	12000W	
Max. AC Output Apparent Power	13200VA	
Nominal AC Output Current	3×18.2A / 3×17.4A / 3×16.7A	@220V/230V/240V phase voltage
Max. AC Output Current	3×20A	
Max. Single Phase Power	8500W	
Max. Continuous AC Passthrough (grid to load)	45A	
Nominal Grid Voltage	220V/380V; 230V/400V; 240V/415V	3W+N+PE
Nominal Grid Frequency	50Hz/60Hz	
Power Factor	>0.99 @rated power	Adjustable 0.8 LD - 0.8 LG
THDi	<3%	@rated power

OUTPUT (BACK UP)

Nominal AC Output Power	12000W	
Max. AC Output Apparent Power	13200VA	
Nominal AC Output Current	3×18.2A / 3×17.4A / 3×16.7A	@220V/230V/240V phase voltage
Max. AC Output Current	3×20A	
Peak Output Apparent Power	1.2× rated power	5 min
Peak Output Apparent Power (10s)	2× rated power	10 s
Nominal Grid Voltage	220V/380V; 230V/400V; 240V/415V	3W+N+PE
Nominal Grid Frequency	50Hz/60Hz	
Transfer Time	<10ms	
THDV	<3%	@100% R Load

INPUT (GENERATOR)

Max. Input Power	30000W
Rated Input Voltage	220V/380V; 230V/400V; 240V/415V
Rated Input Frequency	50Hz/60Hz

PROTECTION

Protection Category	Class I	
DC Switch	Yes	
Anti-islanding Protection	Yes	
AC Overcurrent Protection	Yes	
DC Reverse Protection	Yes	
DC/AC Overvoltage Protection	DC Type II, AC Type III	
Surge Arrester	DC Type II, AC Type II	
Insulation Resistance Detection	Yes	
Leakage Current Protection	Yes	
GFCI	Yes	
BAT Breaker	400A	Optional
AFCI	Optional	
RSD	Optional	

GENERAL

Max. Operation Altitude	4000m	>2000m derating
Ingress Protection Degree	IP65	
Operating Temperature Range	-25°C ~ 60°C	>45°C derating
Relative Humidity	0~100%	
Cooling Method	Smart Cooling	
Mounting	Wall Bracket	
Display	LED + LCD	
Communication	RS485/CAN (BMS), RS485 (Meter), DRMs, CAN (parallel), 2×DO, 2×DI	USB for Wi-Fi/LAN, optional
Dimensions (W×H×D)	460mm × 742mm × 266mm	
Weight	50kg	

CERTIFICATION

Safety	IEC/EN 62109-1/-2	
EMC	IEC/EN 61000-6-1/-2/-3/-4, IEC/EN 62920	
Warranty	5 Years	10 Years optional

EURONET GEN 5 EDGE SERIES SOLAR HYBRID INVERTER - 20KW (LV Three-Phase)

20KW Three-Phase Output | Dual 48V Battery Input | IP65 Rated

The EURONET GEN 5 Edge Series 20KW is a three-phase hybrid inverter that converts solar energy into usable AC power while storing surplus energy in battery for later use. Built around a PV array, battery bank, connected loads and an electricity sensor, the system can prioritise self-consumption, hold energy in reserve, or export it to the public grid. With dual 48V battery ports, 3 independent MPPTs and IP65 protection, it is engineered for reliable indoor or outdoor installation.



6 KEY HIGHLIGHTS



Three-Phase Hybrid Output

Self-consumption, feed-in, back-up and off-grid modes on a 20KW three-phase output.



Dual Battery Input

Two 48V lithium-ion / lead-acid battery ports with up to 380A charge current.



3-MPPT Solar Charging

3 independent MPPTs across a 160V-980V tracking range for flexible PV strings.



Parallel Operation

CAN-based parallel connection lets multiple units scale capacity together.



IP65 Weatherproof Design

Sealed for indoor or outdoor mounting, rated -25°C to 60°C with smart cooling.



Full Communication & Protection Suite

RS485, CAN and DRM ports plus optional Wi-Fi/LAN, backed by GFCI, surge and anti-islanding protection.

INPUT (PV)

Max. PV Access Power	40000W	
Max. PV Usable Power	30000W	
Max. PV Input Voltage	1000V	
Start-up Voltage	120V	
MPPT Operating Voltage Range	160V-980V	
PV Rated Voltage	650V	DC
Max. Input Current per MPPT	20A/20A/20A	
Max. Short Circuit Current per MPPT	30A/30A/30A	
Nos. of MPPT	3	
String per MPPT	1/1/1	

INPUT/OUTPUT (BATTERY)

Battery Type	Lithium-ion / Lead-acid	
No. of Battery Input	2	Max charge/discharge limited to 190A if only one set of terminals used
Battery Rated Voltage	48V	
Battery Voltage Range	40V-60V	
Max. Charge/Discharge Current	380A / 380A	
Max. Charge/Discharge Power	20000W / 20000W	

OUTPUT (GRID)

Nominal AC Output Power	20000W	
Max. AC Output Apparent Power	22000VA	
Nominal AC Output Current	3×30.3A / 3×29A / 3×27.8A	@220V/230V/240V phase voltage
Max. AC Output Current	3×33.3A	
Max. Single Phase Power	8500W	
Max. Continuous AC Passthrough (grid to load)	45A	
Nominal Grid Voltage	220V/380V; 230V/400V; 240V/415V	3W+N+PE
Nominal Grid Frequency	50Hz/60Hz	
Power Factor	>0.99 @rated power	Adjustable 0.8 LD - 0.8 LG
THDi	<3%	@rated power

OUTPUT (BACK UP)

Nominal AC Output Power	20000W	
Max. AC Output Apparent Power	22000VA	
Nominal AC Output Current	3×30.3A / 3×29A / 3×27.8A	@220V/230V/240V phase voltage
Max. AC Output Current	3×33.3A	
Peak Output Apparent Power	1.2× rated power	5 min
Peak Output Apparent Power (10s)	1.5× rated power	10 s
Nominal Grid Voltage	220V/380V; 230V/400V; 240V/415V	3W+N+PE
Nominal Grid Frequency	50Hz/60Hz	
Transfer Time	<10ms	
THDV	<3%	@100% R Load

INPUT (GENERATOR)

Max. Input Power	30000W
Rated Input Voltage	220V/380V; 230V/400V; 240V/415V
Rated Input Frequency	50Hz/60Hz

PROTECTION

Protection Category	Class I	
DC Switch	Yes	
Anti-islanding Protection	Yes	
AC Overcurrent Protection	Yes	
DC Reverse Protection	Yes	
DC/AC Overvoltage Protection	DC Type II, AC Type III	
Surge Arrester	DC Type II, AC Type II	
Insulation Resistance Detection	Yes	
Leakage Current Protection	Yes	
GFCI	Yes	
BAT Breaker	400A	Optional
AFCI	Optional	
RSD	Optional	

GENERAL

Max. Operation Altitude	4000m	>2000m derating
Ingress Protection Degree	IP65	
Operating Temperature Range	-25°C ~ 60°C	>45°C derating
Relative Humidity	0~100%	
Cooling Method	Smart Cooling	
Mounting	Wall Bracket	
Display	LED + LCD	
Communication	RS485/CAN (BMS), RS485 (Meter), DRMs, CAN (parallel), 2×DO, 2×DI	USB for Wi-Fi/LAN, optional
Dimensions (W×H×D)	460mm × 742mm × 266mm	
Weight	50kg	

CERTIFICATION

Safety	IEC/EN 62109-1/-2	
EMC	IEC/EN 61000-6-1/-2/-3/-4, IEC/EN 62920	
Warranty	5 Years	10 Years optional