



# ECOBSS FLEX 3L 6K/8K/10K/12K

The ECOBSS FLEX 3L hybrid inverter ensures maximum efficiency and performance in the power **range from 6 to 12 kW**. When combined with the low-voltage energy storage systems ECOBSS STORE L5/L10/L15, it provides uninterrupted power supply to your building, even in the event of a grid failure. ECOBSS solutions are factory-ready to integrate with the **Energy Manager Power Wallet** enabling efficient automatic energy management using AI algorithms that respond to variable electricity pricing. The ECOBSS FLEX 3L hybrid inverter also features a unique **POWER UPGRADE function** (ask your dealer for details).



## Power wallet

Integrated with the "Energy Manager Power Wallet" energy management system.



## Power upgrade

Possibility to increase the inverter's power from 6 up to 12 kW without hardware replacement.



## Retro fit

Ac coupling to retrofit existing solar system



## Lokalny serwis

Service and technical support in Poland



## Unbalanced output

100% three-phase unbalanced output, with each phase capable of delivering up to 50% of the rated power



## Low voltage system

48V low voltage battery, transporter isolation design



## Dedicated GEN port

Support storing energy from diesel generator



## Scalability

Max. 10 pcs parallel for on-grid and off-grid operation;  
Support multiple batteries parallel



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[www.ecobss.com](http://www.ecobss.com)

# Technical data

Model	FLEX 3L 6K	FLEX 3L 8K	FLEX 3L 10K	FLEX 3L 12K
<b>PV String Input</b>				
Max. DC input voltage (V)	7800	10400	13000	15600
PV operating voltage (V)	550 (160-800)	550 (160-800)	550 (160-800)	550 (160-800)
Start-up voltage (V)	160	160	160	160
MPPT voltage range (V)	200-650	200-650	200-650	200-650
Full MPPT voltage range (V)	350-650	350-650	350-650	350-650
Max. DC input current (A)	13+13	13+13	26+13	26+13
Max. DC short-circuit current (A)	17+17	17+17	34+17	34+17
Number of MPPT trackers	2	2	2	2
Number of strings per MPPT tracker	2 + 1	2 + 1	2 + 1	2 + 1
<b>AC Output/Input</b>				
Rated AC power (W)	6000	8000	10000	12000
Max. AC power (W)	6600	6800	11000	13200
AC input/output current (A)	9.1/8.7	12.1/11.6	15.2/14.5	18.2/17.4
Max. AC input/output current (A)	10/9.6	13.4/12.8	16.7/15.9	20/19.1
Max. short-circuit AC output current (A)	75	75	75	75
Max. continuous AC transfer current (A)	45	45	45	45
Peak power (off-grid)	twice the rated power, 10s	twice the rated power, 10s	twice the rated power, 10s	twice the rated power, 10s
Power factor	0.8 leading – 0.8 lagging	0.8 leading – 0.8 lagging	0.8 leading – 0.8 lagging	0.8 leading – 0.8 lagging
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Output voltage	3L/N/PE 220/380Cac, 230/400Vac	3L/N/PE 220/380Cac, 230/400Vac	3L/N/PE 220/380Cac, 230/400Vac	3L/N/PE 220/380Cac, 230/400Vac
Grid type	Three-phase	Three-phase	Three-phase	Three-phase
Total harmonic distortion	<3%	<3%	<3%	<3%
<b>Battery</b>				
Battery type	Lead-acid or lithium-ion	Lead-acid or lithium-ion	Lead-acid or lithium-ion	Lead-acid or lithium-ion
Battery voltage range (V)	40-60	40-60	40-60	40-60
Max. charging current (A)	120	160	200	240
Max. discharging current (A)	120	160	200	240
External temperature sensor	Yes	Yes	Yes	Yes
Charging curve	Three-stage	Three-stage	Three-stage	Three-stage
Li-Ion battery charging strategy	Self-adaptation to BMS	Self-adaptation to BMS	Self-adaptation to BMS	Self-adaptation to BMS
<b>Performance</b>				
Max. efficiency	97.6%	97.6%	97.6%	97.6%
European efficiency	97.0%	97.0%	97.0%	97.0%
MPPT efficiency	99.0%	99.0%	99.0%	99.0%
<b>Protection</b>				
Reverse PV input polarity	Yes	Yes	Yes	Yes
Insulation resistance detection	Yes	Yes	Yes	Yes
Residual current monitoring unit	Yes	Yes	Yes	Yes
Output overcurrent protection	Yes	Yes	Yes	Yes
Output short-circuit protection	Yes	Yes	Yes	Yes
PV surge protection	Yes	Yes	Yes	Yes
Surge protection	DC Type III / AC Type III	DC Type III / AC Type III	DC Type III / AC Type III	DC Type III / AC Type III
Surge protection category	DC Type II / AC Type III	DC Type II / AC Type III	DC Type II / AC Type III	DC Type II / AC Type III
<b>Certificates and Standards</b>				
Grid regulation	IEC61727/62116, EN50549-1	IEC61727/62116, EN50549-1	IEC61727/62116, EN50549-1	IEC61727/62116, EN50549-1
EMC / Safety standards	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2
<b>General Data</b>				
Temperature range (°C)	-40–60°C; >45°C power derating	-40–60°C; >45°C power derating	-40–60°C; >45°C power derating	-40–60°C; >45°C power derating
Cooling	Active cooling (Smart Cooling)	Active cooling (Smart Cooling)	Active cooling (Smart Cooling)	Active cooling (Smart Cooling)
Noise (dB)	≤50 dB	≤50 dB	≤50 dB	≤50 dB
BMS communication	RS485; CAN	RS485; CAN	RS485; CAN	RS485; CAN
Monitoring	Wi-Fi + App	Wi-Fi + App	Wi-Fi + App	Wi-Fi + App
Weight (kg)	37.5	37.5	37.5	37.5
Dimensions (H × W × D mm)	446 × 576 × 255 (without connectors and brackets)	446 × 576 × 255 (without connectors and brackets)	446 × 576 × 255 (without connectors and brackets)	446 × 576 × 255 (without connectors and brackets)
Protection class	IP65	IP65	IP65	IP65
Mounting type	Wall-mounted	Wall-mounted	Wall-mounted	Wall-mounted
Accessories	Mounting components (bracket, anchors), MC4 connectors (3 sets), MC4 wrench, current transformers, data logger, Allen key	Mounting components (bracket, anchors), MC4 connectors (3 sets), MC4 wrench, current transformers, data logger, Allen key	Mounting components (bracket, anchors), MC4 connectors (3 sets), MC4 wrench, current transformers, data logger, Allen key	Mounting components (bracket, anchors), MC4 connectors (3 sets), MC4 wrench, current transformers, data logger, Allen key
Warranty*	10 years	10 years	10 years	10 years

\*Provided the product is registered on the manufacturer's website [www.ecobss.com](http://www.ecobss.com)

## Distributor

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