



FoxESS

AC CHARGER

Harness the power of the sun day and night with the ground-breaking range of AC-coupled retro-fit chargers from FoxESS.

Full of advanced features and compatible with our very own range of high-voltage batteries, this is a new class of charger.



FoxESS storage solutions are available with advanced and intuitive app based remote control and monitoring functionality.



Easy Installation

Flexible configuration, plug and play set-up, built-in fuse protection.



High Voltage

Includes high-voltage batteries for maximum round-trip efficiency.



IP65 Rated

Engineered to last with maximum flexibility. Suitable for outdoor installation.



Remote Monitoring

Monitor your system remotely via smartphone app or web portal.



up to
5kW
charge/
discharge

REFINED – POWERFUL – FLEXIBLE

BATTERY EXPANSION EASY UPGRADE



Expand your system easily by simply adding additional batteries. There are three battery size options, and four batteries can be installed in series, providing up to 11.6kWh of storage capacity.

For more about the FoxESS range, visit:

WWW.FOX-ESS.COM



TECHNICAL SPECIFICATIONS

Model	AC1-3.0	AC1-3.7	AC1-4.6	AC1-5.0
OUTPUT AC				
Nominal AC power [VA]	3000	3680	4600	4999
Max. apparent AC power [VA]	3000/3300	3680/4048	4600	5500
Rated grid voltage (AC voltage range) [V]	220/230/240 (180 to 270)			
Rated grid Frequency [Hz]	50/60			
Nominal AC current [A]	13	16	20	21.7
Max. AC current [A]	14.4	16/18	21	21.7
Displacement power factor	0.8 leading to 0.8 lagging			
Total harmonic distortion (THDi, rated power)	<3%			
INPUT AC				
Nominal AC power [VA]	3000	3680	4600	4999
Nominal AC current [A]	13	16	20	21.7
Max. AC current [A]	14.4	16	21	21.7
Rated grid voltage (AC voltage range) [V]	220/230/240 (180 to 270)			
Rated grid Frequency [Hz]	50/60			
Power Factor	0.8 leading to 0.8 lagging			
BATTERY				
Battery voltage range [V]	85-450			
Recommended battery voltage [Vdc]	300			
Max.charge/discharge power [W]	6000			
Max.charge/discharge current [A]	35			
Communication interfaces	CAN/RS485			
Reverse connect protection	YES			
EPS OUTPUT (WITH BATTERY)				
EPS MAX power [VA]	5000	5000	6000	6000
EPS rated power [VA]	4000	4000	5000	5000
EPS rated voltage [V], Frequency [Hz]	230VAC, 50/60			
EPS rated current [A]	17.4	17.4	21.7	21.7
EPS peak power [W]	7200, 10s			
Total harmonic distortion (THDv, linear Load)	<2%			
Compatible with the generator	Yes			
EFFICIENCY				
MPPT efficiency	99.90%	99.90%	99.90%	99.90%
Euro-efficiency	97.00%	97.00%	97.00%	97.00%
Max. efficiency	97.80%	97.80%	97.80%	97.80%
Max. efficiency (PV to BAT) @full load	98.50%	98.50%	98.50%	98.50%
Max. efficiency (BAT to AC) @full load	97.00%	97.00%	97.00%	97.00%
POWER CONSUMPTION				
Standby consumption [W] (Idle)	<3			
Idle mode	YES			
STANDARD				
Safety	IEC62109-1/-2 / IEC62040			
EMC	EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3			
Certification	G98 / VDE-AR-N 4105 / G99 / AS4777 / EN50438/ CEI 0-21 / VDE 2510 / NRS097-2-1			
ENVIRONMENT LIMIT				
Ingress protection	IP65			
Operating temperature range [°C]	-20..... +60 (derating at +45)			
Humidity [%]	0~100 (non-condensing)			
Altitude [m]	<2000			
Storage temperature [°C]	-20..... +60			
Noise emission (typical) [dB]	40			
Over voltage category	III (electric supply side), II (PV side)			
GENERAL DATA				
Dimensions (WxHxD) [mm]	422*413*178			
Weight [kg]	22			
Cooling concept	Natural			
Topology	Transformerless			
Communication	Ethernet, Meter, WIFI(optional), DRM, USB, CT			
LCD display	Backlight 20*4 character			
Button	Capacitive Touch Sense			