



P3-S

THREE-PHASE **HYBRID INVERTER**



HIGH VOLTAGE

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



EASY INSTALLATION

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



IP65 RATED

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



REMOTE MONITORING

Monitor your system remotely via smartphone app or web portal.



Advanced System Monitoring
with **FoxCloud V2.0**

REFINED – POWERFUL – FLEXIBLE

Harness the power of the sun day and night with the ground-breaking range of Hybrid inverter from Fox ESS. Full of advanced features and compatible with our very own range of high-voltage batteries, the hybrid range from Fox ESS.

5kW ...>> 15kW



For more information about the Fox ESS range, visit:
www.fox-ess.com

up to
15kW
charge/
discharge



TECHNICAL SPECIFICATIONS

Model	P3-5.0-SH		P3-6.0-SH		P3-8.0-SH		P3-10.0-SH		P3-12.0-SH		P3-15.0-SH	
PV INPUT												
Max. Array Power [Wp]	11000		14000		18000		20000		24000		30000	
Max. DC Input Power [W]	11000		13200		17600		18000		22500		22500	
Max. DC Voltage [V]					1000 [1]							
Nominal DC Operating Voltage [V]					620							
Max. MPPT Input Current [A]	20/20		20/20		20/20/20		20/20/20		20/20/20		20/20/20	
Max. MPPT Short Circuit Current [A]	25/25		25/25		25/25/25		25/25/25		25/25/25		25/25/25	
Max. MPPT Input Power [W]	10000/10000		10000/10000		10000/10000/10000		10000/10000/10000		10000/10000/10000		10000/10000/10000	
Min. Operating PV Voltage [V]					90 [2]							
MPPT Voltage Range [V]					120 ~ 950							
Start-up Input Voltage [V]					140							
No. of MPP Trackers	2		2		3		3		3		3	
Strings per MPP Tracker	1+1		1+1		1+1+1		1+1+1		1+1+1		1+1+1	
BATTERY												
Battery Type					Lithium-Ion battery (LFP)							
Battery Voltage [V]					100 ~ 800							
Min. Operating Battery Voltage [V]					100							
Min. Battery Voltage @Full AC Load [V]	108		125		160		210		250		310	
Max. Charge/ Discharge Current [A]					50.0				250			
Communication Interface					CAN							
AC OUTPUT												
Nominal AC Power [W]	5000		6000		8000		10000		12000		15000	
Max. Apparent AC Power [VA]	5500		6600		8800		11000 [3]		13200		16500	
Rated Grid Voltage (AC Voltage Range) [V]					400/230Vac; 380/220Vac, 3L/N/PE							
Rated Grid Frequency [Hz]					50/60, ±5							
Rated AC Current [A] (Per Phase)	7.6		9.1		12.1		15.2		18.2		22.7	
Max. AC Current [A] (Per Phase)	8.3		10.0		13.3		16.7		20.0		25.0	
Power Factor					1(Adjustable from 0.8 leading to 0.8 lagging)							
THDI [%]					<3 @rated power							
AC INPUT												
Max. AC Power [VA]	6000		7200		9600		12000		14400		16000	
Rated Grid Voltage (AC Voltage Range) [V]					400/230Vac; 380/220Vac, 3L/N/PE							
Rated Grid Frequency [Hz]					50/60, ±5							
Max. AC Current [A] (Per Phase)	9.1		10.9		14.5		18.2		21.8		24.2	
EPS OUTPUT												
Max. Apparent AC Power [VA]	5000		6000		8000		10000		12000		15000	
Peak Apparent AC Power [VA] (60s)	6000		7200		9600		12000		14400		15000	
Rated Output Voltage [V]					400/230Vac; 380/220Vac, 3L/N/PE							
Rated Grid Frequency [Hz]					50/60							
EPS Max. Current [A] (Per Phase)	7.2		8.7		11.6		14.5		17.4		21.7	
Power Factor					1(Adjustable from 0.8 leading to 0.8 lagging)							
Switch Time [ms]					<10							
THDV [%]					<3 @Linear load							
EFFICIENCY												
MPPT Efficiency [%]					99.90							
Max. Efficiency [%]	97.30		97.70		97.70		97.90		97.90		97.90	
European Efficiency [%]					97.20							
PROTECTION												
PV Reverse Polarity Protection					YES							
Battery Reverse Protection					YES							
Anti-Islanding Protection					YES							
Output Short Protection					YES							
Leakage Current Protection					YES							
Insulation Resistor Detection					YES							
Overvoltage Category					III(AC side), II(DC side)							
Reverse Connect Protection					YES							
Overcurrent Protection / Overtemperature Protection					YES							
DC/AC Surge Protection					Type II(PV)/Type II(AC)							
AFCI Protection					Optional							
DC Switch					YES							
GENERAL DATA												
Dimensions (W*H*D) [mm]					600*450*226							
Dimension of Packing (W*H*D) [mm]					665*545*390							
Net Weight [kg]					34							
Gross Weight [kg]					40							
Installation					Wall-mounted							
Operating Temperature Range [°C]					-25 ~ +60 (Derating at 45)							
Storage Temperature [°C]					-40 ~ +70							
Storage/Operation Relative Humidity [%]					0 ~ 100							
Altitude [m]					<4000 @Derating exceeding 2000							
Protective Class					I							
Ingress Protection					IP65 (For outdoor use)							
Standby Consumption [W]					20 ~ 25							
standby Mode					YES							
Cooling	Natural		Natural		Natural		Natural		FAN cooling		FAN cooling	
Noise Grade [dB]	<40		<40		<40		<40		<55		<55	
Inverter Topology					Non-isolated							
Communication Interface					Ethernet, EMS(RS485), Meter, WiLAN(Wifi+LAN+Bluetooth), 4G(Optional), DRM, Ripple Control, USB, BMS(CAN), SG Ready							
Button					Capacitive touch sensor *4							
Buzzer					1, inside(EPS&Earth fault)							

[1] For 1000V system, PV Maximum operating voltage is 950V.
[2] The starting working voltage of the power supply is 90V.
[3] Belgian safety regulations require an apparent power of 10000W to be 10000VA.