



# 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

up to  
**15kW**  
charge/  
discharge

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](http://www.fox-ess.com)



# 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
<b>PV INPUT</b>						
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
<b>BATTERY</b>						
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		
Communication Interface				CAN		
<b>AC OUTPUT</b>						
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			
<b>AC INPUT</b>						
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
<b>EPS OUTPUT</b>						
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			
<b>EFFICIENCY</b>						
MPPT Efficiency [%]			99.90			
Max. Efficiency [%]	97.30	97.70	97.70	97.90	97.90	97.90
European Efficiency [%]			97.20			
<b>PROTECTION</b>						
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		
<b>GENERAL DATA</b>						
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.