

P3-S

THREE-PHASE HYBRID INVERTER

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



Advanced System Monitoring
with **FoxCloud 2.0**



HIGH EFFICIENCY

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.
- AI assistant helps better understand and manage your system.



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					
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]	400/230; 380/220, 3L/N/PE					
Rated Grid Frequency [Hz]	50/60, ±5					
Rated AC Current [A] (Per Phase) ^[4]	7.6	9.1	12.1	15.2	18.2	22.7
Max. AC Current [A] (Per Phase) ^[4]	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]	400/230; 380/220, 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]	400/230; 380/220, 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)					
AFCL 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.

[4] Per-phase output current can be increased via remote settings. After enabling the expansion function, the inverter can deliver up to 22.7A output current per phase.