FOX ESS

DATASHEET

P3 PRO

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.

15kW ••• 30kW

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

up to **30kW** charge/ discharge



TECHNICAL SPECIFICATIONS

MODEL	P3-Pro-15.0	P3-Pro-20.0	P3-Pro-25.0	P3-Pro-30.0
PV INPUT(ONLY FOR HYBRID)				
Max. Array Power [Wp]	30000	40000	50000	60000
Max. Recommended DC Power [W] [1]	7500/7500/7500	10000/10000/10000	12500/12500/12500	15000/15000/15000
Max. DC Voltage [V] [2]	1000			
Nominal DC Operating Voltage [V]	750			
Max. Input Current [A]	32			
Max. Short Circuit Current [A]	40			
MPPT Voltage Range [V]	150 ~ 850			
MPPT Voltage Range [V] (full load)	170 ~ 850	230 ~ 850	280 ~ 850	340 ~ 850
Start-up Voltage [V]	160			
No. of MPP Trackers	3			
Strings per MPP Tracker	2/2/2			
Max. Inverter Backfeed Current to the Array	0			
BATTERY				
Battery Type	Lithium Battery			
Battery Voltage [V]	150 ~ 800			
Full AC Load Battery Voltage [V]	160 ~ 790	220 ~ 790	270 ~ 790	330 ~ 790
Max. Charge/ Discharge Current [A]	50+50			
Number of Battery Input	2			
Communication Interface	CAN			
AC OUTPUT				
Nominal AC Power [VA]	15000	20000	25000	30000
Max. Apparent AC Power [VA]	16500	22000	27500	33000
Rated Grid Voltage (AC Voltage Range) [VAC]	400 / 230 ; 380 / 220 , 3L / N / PE			
Rated Grid Frequency [Hz]	50 / 60 , ±5			
Max. AC Current [A] (Per Phase)	25.0	33.3	41.7	50.0
Power Factor	1(Adjustable from 0.8 Leading to 0.8 Lagging)			
Export Control	YES			
THDI [%]	<3 @Rated Power			
AC INPUT				
Max. AC Power [VA]	22500	30000	35000	35000
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)	34.1	45.5	53.0	53.0
Power Factor	1(Adjustable from 0.8 Leading to 0.8 Lagging)			
EPS OUTPUT				
Max. Apparent AC Power [VA]	15000	20000	25000	30000
Peak Apparent AC Power [VA] (60s)	18000	24000	30000	36000
Rated Output Voltage [V]	400 / 230 ; 380 / 220 , 3L / N / PE			
Rated Grid Frequency [Hz]	50 / 60			
EPS Max. Current [A] (Per Phase)	22.7	30.3	37.9	45.5
Power Factor	1(Adjustable from 0.8 Leading to 0.8 Lagging)			
Parallel Operation	Yes @Max10PCS			
Switch Time [ms]	<10			
THDV [%]	<3 @Rated Power			
EFFICIENCY				
MPPT Efficiency [%]	99.90	99.90	99.90	99.90
Max. Efficiency [%]	97.80	97.80	97.80	97.80
Max. Battery to AC Efficiency [%]	97.60	97.60	97.60	97.60
Max. PV to Battery Efficiency [%]	98.10	98.10	98.10	98.10
European Efficiency [%]	97.30	97.40	97.40	97.40
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			
AC/DC Surge Protection	Type II/Type II			
AFCI Protection	Optional			
DC Switch	Optional			
String Monitoring Function	Optional			
GENERAL DATA				
Dimensions (W*H*D) [mm]	600*560*225			
Dimension of Packing (W*H*D) [mm]	720*680*370			
Net Weight [kg]	52.5			
Gross Weight [kg]	57.5			
Installation	Wall-mounted			
Operating Temperature Range [°C]	-25 ~ +60 (Derating at 45)			
Storage Temperature [°C]	-40 ~ +70			
Storage/Operation Relative Humidity [%]	0 ~ 95 (No condensation)			
Altitude [m]	<4000			
Protective Class	I			
Ingress Protection	IP65 (for Outdoor Use)			
Standby Consumption [W]	200 for Hot Standby , 18 for Cold Standby			
Standby Mode	YES			
Cooling	Smart FAN Cooling			
Noise Grade [dB]	<45	<45	<60	<60
Inverter Topology	Non-isolated			
Communication Interface	Meter, WIFI, 4G(optional), DRM, USB, BMS(CAN), RS485			
Button	Capacitive Touch Sensor *4			
Buzzer	1, Inside (EPS&Earth Fault)			
STANDARD COMPLIANCE MORE AVAILABLE UPON REQUEST)				
Safety	EN 62109-1, EN 62109-2			
EMC	IEC 61000-6-2, IEC 61000-6-3			

*More technical characteristics are available on demand and customized.

[1] Per MPP max. PV input power 15kW.

[2] For 1000V system, Maximum operating voltage is 950V. PV input voltage greater than 955V, PV overvoltage error will be reported.