FOX ESS

DATASHEET

H3-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



TECHNICAL SPECIFICATIONS

MODEL	H3-Pro-15.0	H3-Pro-20.0	H3-Pro-25.0	H3-Pro-29.9	H3-Pro-30.0
PV INPUT(ONLY FOR HYBRID)					
Max. Array Power [Wp]	30000	40000	50000	60000	60000
Max. Recommended DC Power [W] [1]	7500/7500/7500	10000/10000/10000	12500/12500/12500	15000/15000/15000	15000/15000/15000
Max. DC Voltage [V] [2]			1000		
Nominal DC Operating Voltage [V]			750		
Max. Input Current [A]			16+16/16+16/16+16		
Max. Short Circuit Current [A]			20+20/20+20/20+20		
MPPT Voltage Range [V]			150 ~ 850		
MPPT Voltage Range [V] (full load)	170 ~ 850	230 ~ 850	280 ~ 850	340 ~ 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	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	29900	30000
Max. Apparent AC Power [VA]	16500	22000	27500	29900	33000
Rated Grid Voltage (AC Voltage Range) [VAC]			400 / 230 ; 380 / 220 , 3L / N / PE		
Rated Grid Frequency [Hz]			50 / 60		
Rated AC Current [A] (Per Phase)	22.7	30.0	37.9	45.3	45.5
Max. AC Current [A] (Per Phase)	25.0	33.3	41.7	45.3	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	35000
Rated Grid Voltage (AC Voltage Range) [V]			400 / 230 ; 380 / 220 , 3L / N / PE		
Rated Grid Frequency [Hz]			50 / 60		
Max. AC Current [A] (Per Phase)	34.1	45.5	53.0	53.0	53.0
Power Factor			1(Adjustable from 0.8 Leading to 0.8 Lagging)		
EPS OUTPUT					
Nominal AC Power [VA]	15000	20000	25000	30000	30000
Max. Apparent AC Power [VA]	15000	20000	25000	30000	30000
Peak Apparent AC Power [VA] (60s)	18000	24000	30000	36000	36000
Rated Output Voltage [V]			400 / 230 ; 380 / 220 , 3L / N / PE		
Rated Grid Frequency [Hz]			50 / 60		
Rated AC Current [A] (Per Phase)	22.7	30.3	37.9	45.5	45.5
Max. AC Current [A] (Per Phase)	22.7	30.3	37.9	45.5	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	99.90
Max. Efficiency [%]	97.20	97.20	97.10	97.10	97.10
Max. Battery to AC Efficiency [%]	97.20	97.20	97.10	97.10	97.10
Max. PV to Battery Efficiency [%]	98.10	98.10	98.10	98.10	98.10
European Efficiency [%]	96.30	96.30	96.60	96.60	96.60
PROTECTION					
PV Reverse Polarity Protection			YES		
Battery Reverse Protection			YES		
Anti-Islanding Protection			Active Frequency Drift with Positive Feedback		
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			PEDS150H-HM63R-6F		
String Monitoring Function			YES		
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 , 20 for Cold Standby		
Standby Mode			YES		
Cooling			Smart FAN Cooling		
Noise Grade [dB]	<45	<45	<55	<55	<55
Inverter Topology			Non-isolated		
Communication Interface			Meter, WIFI, 4G(Optional), DRM, USB, BMS(CAN), RS485, Ethernet, SG ready		
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		
MANUFACTURE					
Country of Manufacturer			China		

*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.