



H3 Smart

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	H3-5.0-Smart	H3-6.0-Smart	H3-8.0-Smart	H3-9.9-Smart	H3-10.0-Smart	H3-12.0-Smart	H3-15.0-Smart
PV INPUT							
Max. Array Power [Wp]	11000	14000	18000	20000	20000	24000	30000
Max. DC Input Power [W]	11000	13200	17600	18000	18000	22500	22500
Max. DC Voltage [V]				1000 [1]			
Nominal DC Operating Voltage [V]				620			
Max. MPPT Input Current [A]				20/20/20			
Max. MPPT Short Circuit Current [A]				25/25/25			
Max. MPPT Input Power [W]				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				3			
Strings per MPP Tracker				1+1+1			
BATTERY							
Battery Type				Lithium-Ion battery			
Battery Voltage [V]				100 ~ 800			
Min. Operating Battery Voltage [V]				100			
Min. Battery Voltage @Full AC Load [V]	108	125	160	210	210	250	310
Max. Charge/ Discharge Current [A]				50.0			
Communication Interface				CAN			
AC OUTPUT							
Nominal AC Power [W]	5000	6000	8000	9900	10000	12000	15000
Rated Output Apparent Power [VA]	5000	6000	8000	9900	10000	12000	15000
Max. Apparent AC Power [VA]	5500	6600	8800	9900	11000 [3]	13200	16500
Rated Grid Voltage (AC Voltage Range) [V]				400/230; 380/220, 3L/N/PE			
Rated Grid Frequency [Hz]				50/60			
Rated AC Current [A] (Per Phase)	7.6	9.1	12.1	15.0	15.2	18.2	22.7
Max. AC Current [A] (Per Phase)	8.3	10.0	13.3	15.0	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	12000	14400	16000
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)	9.1	10.9	14.5	18.2	18.2	21.8	24.2
EPS OUTPUT							
Nominal Output Power [W]	5000	6000	8000	10000	10000	12000	15000
Max. Apparent AC Power [VA]	5000	6000	8000	10000	10000	12000	15000
Rated Output Voltage [V]				400/230; 380/220, 3L/N/PE			
Rated Grid Frequency [Hz]				50/60			
Rated EPS Current [A] (Per Phase)	7.2	8.7	11.6	14.5	14.5	17.4	21.7
EPS Max. Current [A] (Per Phase)	7.2	8.7	11.6	14.5	14.5	17.4	21.7
Power Factor				1(Adjustable from 0.8 leading to 0.8 lagging)			
Switch Time [ms]				<20			
THDV [%]				<3 @Linear load			
EFFICIENCY							
MPPT Efficiency [%]				99.90			
Max. Efficiency [%]	97.30	97.70	97.70	97.90	97.90	97.90	97.90
European Efficiency [%]				97.20			
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			
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			
Max. Altitude [m]				2000			
Protective Class				I			
Ingress Protection				IP65 (For outdoor use)			
Standby Consumption [W]				20 ~ 25			
standby Mode				YES			
Cooling	Natural	Natural	Natural	Natural	Natural	FAN cooling	FAN cooling
Noise Grade [dB]	<40	<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					
Standard Warranty [year]				10			
Button				Capacitive touch sensor *4			
Buzzer				1, inside(EPS&Earth fault)			
MANUFACTURE							
Country of Manufacturer				China			

[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.