



DATASHEET

Three-Phase Hybrid /AC Inverter

H3-Pro-15.0 / 20.0 / 22.0 / 24.9 / 25.0 / 29.9 / 30.0
AC3-Pro-15.0 / 20.0 / 22.0 / 24.9 / 25.0 / 29.9 / 30.0

H3 PRO SERIES

Three-Phase Hybrid /AC Inverter



Fox ESS storage solutions are available with advanced and intuitive app based remote control and monitoring functionality.



Easy Installation

Flexible configuration, plug and play set-up, built-in fuse protection.



High Voltage

Includes high-voltage batteries for maximum round-trip efficiency.



IP65 Rated

Engineered to last with maximum flexibility. Suitable for outdoor installation.



Remote Monitoring

Monitor your system remotely via smartphone app or web portal.



REFINED – POWERFUL – FLEXIBLE

BATTERY EXPANSION EASY UPGRADE



Easily expand your system by adding extra batteries. There are three battery series you can choose from, which enables a storage capacity of up to 86.40 kWh. A max. of 10 storage inverters can be connected in parallel which allows you to enlarge the system scale based on different installation requirements.

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



TECHNICAL SPECIFICATIONS

| HYBRID INVERTER MODEL: AC INVERTER MODEL: | H3-Pro-15.0 AC3-Pro-15.0 | H3-Pro-20.0 AC3-Pro-20.0 | H3-Pro-22.0 AC3-Pro-22.0 | H3-Pro-24.9 AC3-Pro-24.9 | H3-Pro-25.0 AC3-Pro-25.0 | H3-Pro-29.9 AC3-Pro-29.9 | H3-Pro-30.0 AC3-Pro-30.0 |
|--|-----------------------------|-----------------------------|-----------------------------|--|-----------------------------|-----------------------------|-----------------------------|
| PV INPUT(ONLY FOR HYBRID) | | | | | | | |
| Max. Recommended DC Power [W] ^[1] | 22500 | 30000 | 33000 | 37500 | 37500 | 45000 | 45000 |
| Max. DC Voltage [V] ^[2] | | | | 1000 | | | |
| Normal DC Operating Voltage [V] | | | | 750 | | | |
| Max. Input Current [A] | 32 | 32 | 32 | 32 | 32 | 32 | 32 |
| Max. Short Circuit Current [A] | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| MPPT Voltage Range [V] | | | | 150 ~ 850 | | | |
| MPPT Voltage Range [V] (full load) | 170 ~ 850 | 230 ~ 850 | 250 ~ 850 | 280 ~ 850 | 280 ~ 850 | 340 ~ 850 | 340 ~ 850 |
| Start-up Voltage [V] | | | | 160 | | | |
| No. of MPP Trackers | | | | 3 | | | |
| Strings Per MPP Tracker | 2/2/2 | 2/2/2 | 2/2/2 | 2/2/2 | 2/2/2 | 2/2/2 | 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 | 240 ~ 790 | 270 ~ 790 | 270 ~ 790 | 330 ~ 790 | 330 ~ 790 |
| Max. Charge/ Discharge Current [A] | 50+50 | 50+50 | 50+50 | 50+50 | 50+50 | 50+50 | 50+50 |
| Number of Battery Input | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Communication Interface | | | | CAN | | | |
| AC OUTPUT | | | | | | | |
| Normal AC Power [VA] | 15000 | 20000 | 22000 | 24900 | 25000 | 29900 | 30000 |
| Max. Apparent AC Power [VA] | 16500 | 22000 | 24200 | 24900 | 27500 | 29900 | 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 | 36.7 | 37.7 | 41.7 | 45.4 | 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 | 33000 | 35000 | 35000 | 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 | 50.0 | 53.0 | 53.0 | 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 | 22000 | 25000 | 25000 | 30000 | 30000 |
| Peak Apparent AC Power [VA] (60s) | 18000 | 24000 | 26400 | 30000 | 30000 | 36000 | 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 | 33.3 | 37.9 | 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] | | | | <20 | | | |
| THDV [%] | | | | <3 @Rated Power | | | |
| EFFICIENCY | | | | | | | |
| MPPT Efficiency [%] | 99.90 | 99.90 | 99.90 | 99.90 | 99.90 | 99.90 | 99.90 |
| Max. Efficiency [%] | 97.80 | 97.80 | 97.80 | 97.80 | 97.80 | 97.80 | 97.80 |
| Max. Battery to AC Efficiency [%] | 97.60 | 97.60 | 97.60 | 97.60 | 97.60 | 97.60 | 97.60 |
| Max. PV to Battery Efficiency [%] | 98.10 | 98.10 | 98.10 | 98.10 | 98.10 | 98.10 | 98.10 |
| Euro-Efficiency [%] | 97.30 | 97.40 | 97.40 | 97.40 | 97.40 | 97.40 | 97.40 |
| PROTECTION | | | | | | | |
| PV Reverse Polarity Protection | | | | YES | | | |
| Batter Reverse Protection | | | | YES | | | |
| Anti-Islanding Protection | | | | YES | | | |
| Output Short Protection | | | | YES | | | |
| Leakage Current Protection | | | | YES | | | |
| Insulation Resistor Detection | | | | YES | | | |
| Over Voltage Category | | | | III (AC Side) , II (DC Side) | | | |
| Reverse Connect Protection | | | | YES | | | |
| Over-current Protection / Over-temperature Protection | | | | YES | | | |
| AC/DC Surge Protection | | | | Type II/Type II | | | |
| AFCI Protection | | | | Optional | | | |
| DC SWITCH | | | | Optional | | | |
| String Monitoring Function | | | | Optional | | | |
| GENERAL DATA | | | | | | | |
| Dimension (WxHxD) [mm] | | | | 600*560*225 | | | |
| Dimension of Packing (WxHxD) [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 | | | |
| Noise Emission (typical) [dB] | <45 | <45 | <60 | <60 | <60 | <60 | <60 |
| Storage/Operation Relative Humidity [%] | | | | 0 ~ 95 (Without Condensation) | | | |
| Altitude [m] | | | | <4000 | | | |
| Protective Class | | | | I | | | |
| Ingress Protection | | | | IP65 (for Outdoor Use) | | | |
| Standby Consumption [W] | | | | 200 for Hot Standby , 18 for Cold Standby | | | |
| Idle Mode | | | | YES | | | |
| Cooling | | | | Smart FAN Cooling | | | |
| Inverter Topology | | | | Non-isolated | | | |
| Communication Interface | | | | Meter, WIFI, 4G(optional), DRM, USB, BMS(CAN), RS485 | | | |
| LCD Display | | | | Backlight 16*4 Character | | | |
| 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.