DATASHEET

Single-Phase Hybrid Invetrer

H1-3.0 / 3.7 / 4.6 / 5.0 / 6.0


# FoxESS

## HYBRID INVERTER

Harness the power of the sun day and night with the ground-breaking range of hybrid inverters from FoxESS.

Full of advanced features and compatible with our very own range of high-voltage batteries, the hybrid range from FoxESS is a new class of Inverter.

FoxESS 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

Connects to 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

Expand your system easily by simply adding additional batteries. There are three battery size options, and four batteries can be installed in series, providing up to 11.6kWh of storage capacity.

For more about the FoxESS range, visit:

WWW.FOX-ESS.COM

# TECHNICAL SPECIFICATIONS

| Model | H1-3.0 | H1-3.7 | H1-4.6 | H1-5.0 | H1-6.0 |
|---|---|---|---|---|---|
| **INPUT PV** | | | | | |
| Max.recommended DC power [W] | 3900 | 4680 | 5980 | 6500 | 7800 |
| Max.DC voltage [V] | | | 600 | | |
| Nominal DC operating voltage [V] | | | 360 | | |
| Max. input current [A] | | | 12.5 | | |
| Max. short circuit current [A] | | | 15 | | |
| MPPT voltage range [V] | | | 80-550 | | |
| No. of MPP trackers | 2 | 2 | 2 | 2 | 2 |
| Strings per MPP tracker | 1 | 1 | 1 | 1 | 1 |
| **OUTPUT AC** | | | | | |
| Nominal AC power [VA] | 3000 | 3680 | 4600 | 4999 | 6000 |
| Max. apparent AC power [VA] | 3000/3300 | 3680/4048 | 4600 | 5500 | 6600 |
| Rated grid voltage (AC voltage range) [V] | | | 220/230/240 (180 to 270) | | |
| Rated grid Frequency [Hz] | | | 50/60 | | |
| Nominal AC current [A] | 13 | 16 | 20 | 21.7 | 26.1 |
| Max. AC current [A] | 14.4 | 16/18 | 21 | 21.7 | 28.71 |
| Displacement power factor | | | 0.8 leading to 0.8 lagging | | |
| Total harmonic distortion (THDi, rated power) | | | <3% | | |
| **INPUT AC** | | | | | |
| Nominal AC power [VA] | 3000 | 3680 | 4600 | 4999 | 6000 |
| Nominal AC current [A] | 13 | 16 | 20 | 21.7 | 26.1 |
| Max. AC current [A] | 14.4 | 16 | 21 | 21.7 | 26.1 |
| Rated grid voltage (AC voltage range) [V] | | | 220/230/240 (180 to 270) | | |
| Rated grid Frequency [Hz] | | | 50/60 | | |
| Power Factor | | | 0.8 leading to 0.8 lagging | | |
| **BATTERY** | | | | | |
| Battery voltage range [V] | | | 85-450 | | |
| Recommended battery voltage [Vdc] | | | 300 | | |
| Max.charge/discharge power [W] | | | 6000 | | |
| Max.charge/discharge current [A] | | | 35 | | |
| Communication interfaces | | | CAN/RS485 | | |
| Reverse connect protection | | | YES | | |
| **EPS OUTPUT (WITH BATTERY)** | | | | | |
| EPS MAX power [VA] | 5000 | 5000 | 6000 | 6000 | 7200 |
| EPS rated power [VA] | 4000 | 4000 | 5000 | 5000 | 6000 |
| EPS rated voltage [V], Frequency [Hz] | | | 230VAC, 50/60 | | |
| EPS rated current [A] | 17.4 | 17.4 | 21.7 | 21.7 | 26.1 |
| EPS peak power [W] | | | 7200, 10s | | |
| Total harmonic distortion (THDv, linear Load) | | | <2% | | |
| Compatible with the generator | | | Yes | | |
| **EFFICIENCY** | | | | | |
| MPPT efficiency | 99.90% | 99.90% | 99.90% | 99.90% | 99.90% |
| Euro-efficiency | 97.00% | 97.00% | 97.00% | 97.00% | 97.00% |
| Max. efficiency | 97.80% | 97.80% | 97.80% | 97.80% | 97.80% |
| Max. efficiency (PV to BAT) @full load | 98.50% | 98.50% | 98.50% | 98.50% | 98.50% |
| Max. efficiency (BAT to AC) @full load | 97.00% | 97.00% | 97.00% | 97.00% | 97.00% |
| **POWER CONSUMPTION** | | | | | |
| Standby consumption [W] (Idle) | | | <3 | | |
| Idle mode | | | YES | | |
| **STANDARD** | | | | | |
| Safety | | | IEC62109-1/-2 / IEC62040 | | |
| EMC | | | EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3 | | |
| Cetification | | | G98 / VDE-AR-N 4105 / G99 / AS4777 / EN50438/ CEI 0-21 / VDE 2510 / NRS097-2-1 | | |
| **ENVIRONMENT LIMIT** | | | | | |
| Ingress protection | | | IP65 | | |
| Operating temperature range [°C] | | | -20..... +60 (derating at +45) | | |
| Humidity [%] | | | 0~100 (non-condensing) | | |
| Altitude [m] | | | <2000 | | |
| Storage temperature [°C] | | | -20..... +60 | | |
| Noise emission (typical) [dB] | | | 40 | | |
| Over voltage category | | | III (electric supply side), II (PV side) | | |
| **GENERAL DATA** | | | | | |
| Dimensions (WxHxD) [mm] | | | 422*413*178 | | |
| Weight [kg] | | | 22 | | |
| Cooling concept | | | Natural | | |
| Topology | | | Transformerless | | |
| Communication | | | Ethernet, Meter, WIFI(optional), DRM, USB, CT | | |
| LCD display | | | Backlight 20*4 character | | |
| Button | | | Capacitive Touch Sense | | |