

#### DATASHEET

## Single-Phase Hybrid/AC Inverter

H1-3.0-E-G2 / 3.7 / 4.6 / 5.0 / 6.0 AC1-3.0-E-G2 / 3.7 / 4.6 / 5.0 / 6.0



# H1(G2)&AC1(G2)

# HYBRID/AC INVERTER

Harness the power of the sun day and night with the ground-breaking range of Hybrid & AC inverters from Fox ESS.

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



#### **IP65 Rated**

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



#### **Remote Monitoring**

Monitor your system remotely via smartphone app or web portal.



# BATTERY EXPANSION EASY UPGRADE



Expand your system easily by simply adding additional batteries. There are six battery size options, and Max. seven batteries can be installed in series, providing up to 33.24kWh of storage capacity.

For more about the FOX range, visit:

WWW.FOX-ESS.COM









## TECHNICAL SPECIFICATIONS

Model	H1-3.0-E-G2 AC1-3.0-E-G2	H1-3.7-E-G2 AC1-3.7-E-G2	H1-4.6-E-G2 AC1-4.6-E-G2	H1-5.0-E-G2 AC1-5.0-E-G2	H1-6.0-E-G AC1-6.0-E-G
NPUT PV (ONLY FOR HYBRID)	4500	5500	6000	7500	0000
Aax. Input Power [W]	4500	5500	6900	7500	9000
Aax. Input Voltage [V]			600		
tart-up Input Voltage [V]			75		
Rated Input Voltage [V]			360		
MPPT Operating Voltage Range [V]			80 ~ 550		
Max. Input Current [A]			16 / 16		
Max. Short-circuit Current [A]			20 / 20		
No. of Independent MPP Trackers	2	2	2	2	2
No. of Strings per MPP Tracker	1	1	1	1	1
BATTERY CONNECTION					
Battery Type			Lithium Battery (LFP)		
Battery Voltage [V]	80 ~ 480				
Max. Charge/Discharge Current [A]	40				
Communication Interface		CAN(comm	nunicate with inverter, upg	rade BMS)	
AC INPUT AND OUTPUT (GRID)					
Vlax. AC Input Power [VA]	7000	7680	9600	10000	12000
Max. AC Input Current (per phase) [A]	31.8	34.9	43.6	45.5	54.5
Rated Output Power [W]	3000	3680	4600	5000	6000
Max. Output Apparent Power [VA]	3300	4048/3680 <sup>1</sup>	5060	5500	6600
Rated Output Current (per phase) [A]	13.6	16.7/16 <sup>1</sup>	20.9	22.7	27.3
Max. Output Current [A]	15.0	18.4	23.0	25.0	30
Rated Grid Voltage [V]			220/230/240	====	-
Rated Grid Frequency [Hz]			50/60		
	·				
Power Factor	1 ( Adjustable from 0.8 leading to 0.8 lagging )				
THDI [%]			<3 @rated power		
EPS OUTPUT (WITH BATTERY)	5000	5000	5000	5000	
Max. Output Apparent Power [VA]	5000	5000	6000	6000	6000
Peak Output Apparent Power (60s) [VA]	6000	6000	7200	7200	7200
Max. Current (per phase) [A]	22.7	22.7	27.3	27.3	27.3
Rated Output Voltage [V]			220/230/240		
Rated Output Frequency [Hz]			50/60		
Power Factor		1 ( Adjusta	ble from 0.8 leading to 0.8	lagging )	
THDv ( linear Load) [%]			<2 @rated power		
Parallel operation [PCS]			10		
Switch time [ms]			<20		
EFFICIENCY					
uro Efficiency [%]			97.00		
Max. Efficiency [%]			97.80		
Max. Battery Charge Efficiency			37.00		
			98.50		
(PV to BAT) (@full load) [%]					
Max. Battery Discharge Efficiency			97.00		
BAT to AC) (@full load) [%]					
PROTECTION					
nsulation Monitoring			YES		
Residual Current Monitoring			YES		
OC Reverse Polarity Protection			YES		
Anti-islanding Protection			YES		
AC Short-circuit Protection			YES		
			YES		
AC Overcurrent/Overvoitage Protection					
· -			YES		
AC Overcurrent/Overvoltage Protection DC Switch Battery Wack-up Function					
OC Switch Battery Wack-up Function			YES		
DC Switch Battery Wack-up Function BPD			YES DC: Type II, /AC: Type III		
OC Switch Battery Wack-up Function SPD AFCI			YES		
OC Switch Battery Wack-up Function GPD AFCI SENERAL DATA			YES DC: Type II, /AC: Type III Optional		
OC Switch Battery Wack-up Function BPD AFCI SENERAL DATA Dimensions (WXHxD) [mm]			YES DC: Type II, /AC: Type III Optional 434*418*185		
OC Switch Battery Wack-up Function BPD AFCI SENERAL DATA Dimensions (WXHXD) [mm] Weight [kg]			YES DC: Type II, /AC: Type III Optional 434*418*185 23		
OC Switch Battery Wack-up Function BPD AFCI SENERAL DATA Dimensions (WXHXD) [mm] Weight [kg] Installation			YES DC: Type II, /AC: Type III Optional 434*418*185 23 Wall-Mounted		
DC Switch Stattery Wack-up Function SPD SECI SENERAL DATA Dimensions (WxHxD) [mm] Weight [kg] Installation			YES DC: Type II, /AC: Type III Optional 434*418*185 23 Wall-Mounted Non-isolated		
OC Switch Battery Wack-up Function BFD AFCI SENERAL DATA Dimensions (WXHXD) [mm] Weight [kg] Installation			YES DC: Type II, /AC: Type III Optional 434*418*185 23 Wall-Mounted		
OC Switch Battery Wack-up Function BFD AFCI SENERAL DATA Dimensions (WXHXD) [mm] Weight [kg] Installation Topology Cooling Method			YES DC: Type II, /AC: Type III Optional 434*418*185 23 Wall-Mounted Non-isolated		
OC Switch Battery Wack-up Function BFD AFCI SENERAL DATA Dimensions (WXHXD) [mm] Weight [kg] Installation Topology Cooling Method Noise Emission [dB]			YES DC: Type II, /AC: Type III Optional  434*418*185 23 Wall-Mounted Non-isolated Natural		
OC Switch Battery Wack-up Function BAFCI SENERAL DATA Dimensions (WxHxD) [mm] Weight [kg] Installation Topology Cooling Method Noise Emission [dB] Max. Operating Altitude [m]			YES DC: Type II, /AC: Type III Optional  434*418*185 23 Wall-Mounted Non-isolated Natural 35		
DC Switch Battery Wack-up Function SPD SECTION OF THE SECTION OF T			YES DC: Type II, /AC: Type III Optional  434*418*185 23 Wall-Mounted Non-isolated Natural 35 2000		
DC Switch Battery Wack-up Function SPD SECTION OF THE SECTION OF T			YES DC: Type II, /AC: Type III Optional  434*418*185 23 Wall-Mounted Non-isolated Natural 35 2000 -25 ~ 60 0 ~ 100		
DC Switch Battery Wack-up Function BPD SERIERAL DATA Dimensions (WxHxD) [mm] Weight [kg] Installation Topology Cooling Method Voise Emission [dB] Max. Operating Altitude [m] Deperating Temperature Range [°C ] Humidity ( No Condensation ) [%] Protection Degree			YES DC: Type II, /AC: Type III Optional  434*418*185 23 Wall-Mounted Non-isolated Natural 35 2000 -25 ~ 60 0 ~ 100 IP65		
DC Switch Stattery Wack-up Function SPD SENERAL DATA Dimensions (WXHXD) [mm] Veight [kg] Installation Spoology Spooling Method Voise Emission [dB] Max. Operating Altitude [m] Deperating Temperature Range [°C ] Humidity ( No Condensation ) [%] Protection Degree Standby consumption[W]			YES DC: Type II, /AC: Type III Optional  434*418*185 23 Wall-Mounted Non-isolated Natural 35 2000 -25 ~ 60 0 ~ 100 IP65 < 10	S (autilian)	
DC Switch Battery Wack-up Function BPD SENERAL DATA Dimensions (WXHXD) [mm] Weight [kg] Installation Cooling Method Noise Emission [dB] Max. Operating Altitude [m] Diperating Temperature Range [°C ] Humidity ( No Condensation ) [%] Protection Degree Standby consumption[W] Monitoring Module		WiFi, LAN(opt	YES DC: Type II, /AC: Type III Optional  434*418*185 23 Wall-Mounted Non-isolated Natural 35 2000 -25 ~ 60 0 ~ 100 IP65 <10 cional), 4G(optional), GPR		
DC Switch Stattery Wack-up Function SPD SENERAL DATA Dimensions (WXHXD) [mm] Veight [kg] Installation Spology Spoling Method Moise Emission [dB] Max. Operating Altitude [m] Operating Temperature Range [°C ] Sidumidity ( No Condensation ) [%] Protection Degree Standby consumption[W] Monitoring Module Communication		WiFi, LAN(opt	YES DC: Type II, /AC: Type III Optional  434*418*185 23 Wall-Mounted Non-isolated Natural 35 2000 -25 ~ 60 0 ~ 100 IP65 <10 cional), 4G(optional), GPR DRM, Ripple Control, USB		
oc Switch Sattery Wack-up Function PD SFCI SENERAL DATA Dimensions (WXHXD) [mm] Veight [kg] Installation Spology Spoling Method Stoiling Metho		WiFi, LAN(opt	YES DC: Type II, /AC: Type III Optional  434*418*185 23 Wall-Mounted Non-isolated Natural 35 2000 -25 ~ 60 0 ~ 100 IP65 <10 cional), 4G(optional), GPR		
C Switch attery Wack-up Function PD FCI FINEMERAL DATA Simensions (WXHXD) [mm] Veight [kg] stallation opology ooling Method loise Emission [dB] Max. Operating Altitude [m] Operating Temperature Range [°C ] sumidity ( No Condensation ) [%] rotection Degree tandby consumption[W] Monitoring Module ommunication sisplay	ı REQUEST)	WiFi, LAN(opt	YES DC: Type II, /AC: Type III Optional  434*418*185 23 Wall-Mounted Non-isolated Natural 35 2000 -25 ~ 60 0 ~ 100 IP65 <10 cional), 4G(optional), GPR DRM, Ripple Control, USB		
C Switch Sattery Wack-up Function PD SFCI SENERAL DATA Dimensions (WXHXD) [mm] Veight [kg] Installation Spoology Scoling Method Loise Emission [dB] Max. Operating Altitude [m] Operating Temperature Range [°C ] Illumidity ( No Condensation ) [%] Intercection Degree tandby consumption[W] Monitoring Module Communication Display TANDARD COMPLIANCE (MORE AVAILABLE UPON	ı REQUEST)	WiFi, LAN(opt RS485,	YES DC: Type II, /AC: Type III Optional  434*418*185 23 Wall-Mounted Non-isolated Natural 35 2000 -25 ~ 60 0 ~ 100 IP65 <10 cional), 4G(optional), GPR DRM, Ripple Control, USB		
DC Switch Battery Wack-up Function BPD BFCI BENERAL DATA Dimensions (WXHXD) [mm] Weight [kg] Installation Topology Cooling Method Voice Emission [dB] Wax. Operating Altitude [m] Deperating Temperature Range [°C ] Humidity ( No Condensation ) [%] Protection Degree Standby consumption[W]	ı REQUEST)	WiFi, LAN(opt RS485,	YES DC: Type II, /AC: Type III Optional  434*418*185 23 Wall-Mounted Non-isolated Natural 35 2000 -25 ~ 60 0 ~ 100 IP65 < 10 cional), 4G(optional), GPR DRM, Ripple Control, USB LCD, App, Website		

<sup>\*</sup> More technical characteristics are avaliable on demand and customized. 1  $\circ$  3680 for G98. 2  $\circ$  4600 for German and Belgium. 3  $\circ$  5000 for Australia and Belgium