

### DATASHEFT

## Single-Phase Hybrid/AC Inverter

H1-3.0 / 3.7 / 4.6 / 5.0 / 6.0-E-G2 AC1-3.0 / 3.7 / 4.6 / 5.0 / 6.0-E-G2 H1-4.6 / 5.0-E1-G2 AC1-4.6 / 5.0-F1-G2



# 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 three 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-G2 AC1-6.0-E-G2	H1-4.6-E1-G2 AC1-4.6-E1-G2	H1-5.0-E1-G2 AC1-5.0-E1-G2
NPUT PV (ONLY FOR HYBRID)							
lax. PV Array Power [Wp]	6000	7400	9200	10000	12000	9200	10000
lax. Input Power [W]	4500 A:2250 B:2250	5500 A:2750 B:2750	6900 A:3450 B:3450	7500 A:3750 B:3750	9000 A:4500 B:4500	6900 A:3450 B:3450	7500 A:3750 B:3750
Ann Innish Voltage DVI	A.2230 B.2230	A.2730 B.2730	A.3430 B.3430		A.4300 B.4300	A.3430 B.3430	A.3730 B.3730
Aax. Input Voltage [V]				600			
tart-up Input Voltage [V] ated Input Voltage [V]				75 360			
APPT Operating Voltage Range [V]				80 ~ 550			
Nax. Input Current [A]				16 / 16			
Max. Short-circuit Current [A]				20 / 20			
Io. of Independent MPP Trackers				2			
Io. of Strings per MPP Tracker				1			
SATTERY CONNECTION				1			
attery Type				Lithium Battery (LFP)			
attery Voltage [V]				80 ~ 480			
Nax. Charge/Discharge Current [A]				40			
Communication Interface			CAN(commu	nicate with inverter, u	pgrade BMS)		
C INPUT AND OUTPUT (GRID)			, and the second	,	,		
Nax. AC Input Power [VA]	6000	7680	9200	10000	12000	9200	10000
Nax. AC Input Current (per phase) [A]	27.3	34.9	41.8	45.5	54.5	41.8	45.5
lated Output Power [W]	3000	3680	4600	5000	6000	4600	5000
ated Apparent Power [VA]	3000	3680	4600	5000	6000	4600²	5000³
Max. Output Apparent Power [VA]	3300	4048/3680 <sup>1</sup>	5060	5500	6600	4600	5000
Rated Output Current (per phase) [A](For AUS		16.0	20.0	21.7	26.1	20.0	21.7
Max. Output Current [A]	15.0	18.4	23.0	25.0	30.0	20.9	22.7
Rated Grid Voltage [V]				220/230/240			
ated Grid Frequency [Hz]				50/60			
ower Factor	1 ( Adjustable from 0.8 leading to 0.8 lagging )						
HDi [%]	<3 @rated power						
PS OUTPUT (WITH BATTERY)							
Лах. Output Apparent Power [VA]	3000	3680	4600	5000	6000	4600	5000
Rated Output Power [W]	3000	3680	4600	5000	6000	4600	5000
eak Output Apparent Power (60s) [VA]	3600	4400	5500	6000	7200	5500	6000
Лах. Current (per phase) [A]	13.6	16.7	20.9	22.7	27.3	20.9	22.7
ated Output Voltage [V]				220/230/240			
Rated Output Frequency [Hz]				50/60			
Power Factor			1 ( Adjustabl	e from 0.8 leading to 0	0.8 lagging )		
HDv ( linear Load) [%]				<2 @rated power			
Parallel operation [PCS]				10			
witch time [ms]				<20			
FFICIENCY							
uro Efficiency [%]	95.26	95.70	96.23	96.30	96.33	96.23	96.30
Max. Efficiency [%]	97.01	97.08	97.04	97.08	97.08	97.04	97.08
Max. Battery Charge Efficiency (PV to BAT) (@1				98.50			
Max. Battery Discharge Efficiency (BAT to AC) (	(@full load) [%]			97.00			
ROTECTION							
				YES			
nsulation Monitoring tesidual Current Monitoring				YES			
nsulation Monitoring esidual Current Monitoring IC Reverse Polarity Protection				YES			
nsulation Monitoring desidual Current Monitoring DC Reverse Polarity Protection anti-islanding Protection			Active Freque	YES ency Drift with Positive	e Feedback		
nsulation Monitoring esidual Current Monitoring IC Reverse Polarity Protection Inti-islanding Protection IC Short-circuit Protection			Active Frequ	YES ency Drift with Positive YES	e Feedback		
nsulation Monitoring desidual Current Monitoring DC Reverse Polarity Protection unti-islanding Protection UC Short-circuit Protection UC Overcurrent/Overvoltage Protection			Active Frequ	YES ency Drift with Positive YES YES	e Feedback		
nsulation Monitoring esidual Current Monitoring C Reverse Polarity Protection Inti-Islanding Protection C Short-circuit Protection C Overcurrent/Overvoltage Protection C Switch			Active Frequ	YES ency Drift with Positive YES YES YES	e Feedback		
nsulation Monitoring esidual Current Monitoring C Reverse Polarity Protection Inti-islanding Protection C Short-circuit Protection C Overcurrent/Overvoltage Protection IC Switch attery Wack-up Function			Active Frequ	YES ency Drift with Positive YES YES YES YES	e Feedback		
nsulation Monitoring esidual Current Monitoring C Reverse Polarity Protection Inti-islanding Protection C Short-circuit Protection C Overcurrent/Overvoltage Protection C Switch attery Wack-up Function Iver Voltage category			Active Frequ	YES ency Drift with Positive YES YES YES YES YES YES III(AC), II(DC)	e Feedback		
nsulation Monitoring esidual Current Monitoring IC Reverse Polarity Protection Inti-islanding Protection IC Short-circuit Protection IC Overcurrent/Overvoltage Protection IC Switch attery Wack-up Function Iver Voltage category IFCI			Active Frequ	YES ency Drift with Positive YES YES YES YES	e Feedback		
asulation Monitoring esidual Current Monitoring C Reverse Polarity Protection nti-islanding Protection C Short-circuit Protection C Overcurrent/Overvoltage Protection C Switch attery Wack-up Function iver Voltage category FCI ENERAL DATA			Active Frequ	YES ency Drift with Positive YES YES YES YES YES YES Optional	e Feedback		
asulation Monitoring esidual Current Monitoring C Reverse Polarity Protection Inti-islanding Protection C Short-circuit Protection C Overcurrent/Overvoltage Protection C Switch attery Wack-up Function Iver Voltage category FCI IENERAL DATA Imensions (WXHXD) [mm]			Active Frequ	YES ency Drift with Positive YES YES YES YES YES III(AC), II(DC) Optional	e Feedback		
nsulation Monitoring esidual Current Monitoring C Reverse Polarity Protection Inti-islanding Protection C Short-circuit Protection C Overcurrent/Overvoltage Protection C Switch attery Wack-up Function Iver Voltage category FCI IENERAL DATA Imensions (WXHXD) [mm] Veight [kg]			Active Frequ	YES ency Drift with Positive YES YES YES YES YES III(AC), II(DC) Optional 434*418*185 22	e Feedback		
nsulation Monitoring esidual Current Monitoring C Reverse Polarity Protection Inti-islanding Protection C Short-circuit Protection C Overcurrent/Overvoltage Protection C Switch attery Wack-up Function Iver Voltage category FCI IENERAL DATA Imensions (WXHXD) [mm] Veight [kg] stallation			Active Frequ	YES ency Drift with Positive YES YES YES YES YES III(AC), II(DC) Optional  434*418*185 22 Wall-Mounted	e Feedback		
asulation Monitoring esidual Current Monitoring C Reverse Polarity Protection nti-islanding Protection C Short-circuit Protection C Overcurrent/Overvoltage Protection C Switch attery Wack-up Function iver Voltage category FCI ENERAL DATA imensions (WXHXD) [mm] Veight [kg] istallation			Active Frequ	YES ency Drift with Positive YES YES YES YES III(AC), II(DC) Optional  434*418*185 22 Wall-Mounted Non-isolated	e Feedback		
asulation Monitoring esidual Current Monitoring C Reverse Polarity Protection nti-islanding Protection C Short-circuit Protection C Overcurrent/Overvoltage Protection C Switch attery Wack-up Function ver Voltage category FCI ENERAL DATA imensions (WXHXD) [mm] /eight [kg] astallation opology ooling Method			Active Frequ	YES ency Drift with Positive YES YES YES YES III(AC), II(DC) Optional  434*418*185 22 Wall-Mounted Non-isolated Natural	e Feedback		
asulation Monitoring esidual Current Monitoring C Reverse Polarity Protection nti-islanding Protection C Short-circuit Protection C Overcurrent/Overvoltage Protection C Switch attery Wack-up Function ver Voltage category FCI ENERAL DATA imensions (WXHXD) [mm] Veight [kg] astallation opology ooling Method oise Emission [dB]			Active Frequ	YES ency Drift with Positive YES YES YES YES YES III(AC), II(DC) Optional  434*418*185 22 Wall-Mounted Non-isolated Natural 35	e Feedback		
sulation Monitoring esidual Current Monitoring C Reverse Polarity Protection nti-islanding Protection C Short-circuit Protection C Overcurrent/Overvoltage Protection C Switch eattery Wack-up Function ver Voltage category FCI ENERAL DATA imensions (WXHXD) [mm] reight [kg] stallation popology pooling Method oise Emission [dB] lax. Operating Altitude [m]			Active Frequ	YES ency Drift with Positive YES YES YES YES III(AC), II(DC) Optional  434*418*185 22 Wall-Mounted Non-isolated Natural 35 2000	e Feedback		
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asulation Monitoring esidual Current Monitoring C Reverse Polarity Protection nti-islanding Protection C Short-circuit Protection C Overcurrent/Overvoltage Protection C Switch attery Wack-up Function ver Voltage category FCI ENERAL DATA imensions (WXHXD) [mm] //eight [kg] stallation opology cooling Method oise Emission [dB] lax. Operating Altitude [m] perating Temperature Range [°C] umidity ( No Condensation ) [%]			Active Frequ	YES ency Drift with Positive YES YES YES YES III(AC), II(DC) Optional  434*418*185 22 Wall-Mounted Non-isolated Natural 35 2000 -25 ~ 60 0 ~ 100	e Feedback		
asulation Monitoring esidual Current Monitoring C Reverse Polarity Protection nti-islanding Protection C Short-circuit Protection C Overcurrent/Overvoltage Protection C Switch attery Wack-up Function over Voltage category FCI ENERAL DATA imensions (WxHxD) [mm] Veight [kg] sstallation opology ooling Method oise Emission [dB] fax. Operating Altitude [m] uperating Temperature Range [°C] umidity ( No Condensation ) [%] aggress protection			Active Frequ	YES ency Drift with Positive YES YES YES YES III(AC), II(DC) Optional  434*418*185 22 Wall-Mounted Non-isolated Natural 35 2000 -25 ~ 60 0 ~ 100 IP65	e Feedback		
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Assilation Monitoring Assidual Current Monitoring Assidual Protection Assidual Protect			WiFi, L	YES ency Drift with Positive YES YES YES YES III(AC), II(DC) Optional  434*418*185 22 Wall-Mounted Non-isolated Natural 35 2000 -25 ~ 60 0 ~ 100 IP65 < 15 AN(optional), 4G(optional)	onal)		
asulation Monitoring esidual Current Monitoring C Reverse Polarity Protection Inti-islanding Protection C Short-circuit Protection C Overcurrent/Overvoltage Protection C Switch attery Wack-up Function INDER SWITCH INDER STATE INTITUTE STATE INTIT			WiFi, L	YES ency Drift with Positive YES YES YES YES III(AC), II(DC) Optional  434*418*185 22 Wall-Mounted Non-isolated Natural 35 2000 -25 ~ 60 0 ~ 100 IP65 <15 AN(optional), 4G(optional), 4G	onal)		
asulation Monitoring esidual Current Monitoring C Reverse Polarity Protection Inti-islanding Protection C Short-circuit Protection C Overcurrent/Overvoltage Protection C Switch attery Wack-up Function Iver Voltage category IFCI IENERAL DATA Inimensions (WXHXD) [mm] Iveight [kg] Installation Intition Method Intition M			WiFi, L	YES ency Drift with Positive YES YES YES YES III(AC), II(DC) Optional  434*418*185 22 Wall-Mounted Non-isolated Natural 35 2000 -25 ~ 60 0 ~ 100 IP65 <15 AN(optional), 4G(optic RM, Ripple Control, US LCD, App, Website	onal)		
asulation Monitoring esidual Current Monitoring C Reverse Polarity Protection nti-islanding Protection C Short-circuit Protection C Overcurrent/Overvoltage Protection C Switch attery Wack-up Function ver Voltage category FCI ENERAL DATA imensions (WxHxD) [mm] //eight [kg] sstallation popology pooling Method oise Emission [dB] lax. Operating Altitude [m] perating Temperature Range [°C] umidity ( No Condensation ) [%] agress protection tandby consumption[W] Ionitoring Module pommunication isplay pountry Of Manufacture			WiFi, L	YES ency Drift with Positive YES YES YES YES III(AC), II(DC) Optional  434*418*185 22 Wall-Mounted Non-isolated Natural 35 2000 -25 ~ 60 0 ~ 100 IP65 <15 AN(optional), 4G(optional), 4G	onal)		
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<sup>\*</sup> More technical characteristics are available on demand and customized.