DATASHEET

FOX ESS

F SERIES

SINGLE-PHASE **INVERTER**



HIGH PERFORMANCE

Low start-up voltage, wide voltage range, 97.6% maximum efficiency.

EASY INSTALLATION

Flexible configuration, plug and play set-up.

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

Fox ESS offers a range of dual MPPT single-phase inverter offering unparalleled efficiency and performance. Our range starts with the F3000 - small and compact and with an ultra-low start-up voltage that will ensure you harvest the most energy possible from your solar panels.

3kW ···» 6kW

For more about the Fox ESS range of single-phase inverters, visit:
www.fox-ess.com



TECHNICAL SPECIFICATIONS

MODEL	F3000	F3600	F4600	F5000	F5300	F6000
INPUT(PV)						
Max. Input Power [W]*1	6000	7200	9200	10000	10600	12000
Max. Input Voltage [V]*2	600					
Nominal DC Operating Voltage [V]	360					
Max. Input Current (Input A/Input B) [A]	20/20					
Max. Short Circuit Current (Input A/Input B) [A]	26/26					
MPPT Voltage Range [V]	60 ~ 550					
MPPT Voltage Range (Full Load) [V]	90 ~ 550	100 ~ 550	130 ~ 550	140 ~ 550	150 ~ 550	160 ~ 550
Start-up Voltage of LCD [V]	60					
Start-up Voltage of Operation [V]	80					
No. of MPP Trackers	2					
Strings per MPP Tracker	1+1					
Max. Inverter Backfeed Current to the Array [mA]	0					
OUTPUT(AC)						
Nominal Active AC Power [W]	3000	3600	4600	5000	5300	6000
Max. Apparent AC Power [VA]	3300	3960	5060	5500	5830	6600
Rated Grid Voltage [V]	220/230/240					
Rated Grid Frequency [Hz]	50/60, ±5					
Nominal AC Current [A]	13.6	16.4	20.9	22.7	24.1	27.3
Max. AC Current [A]	15.0	18.0	23.0	25.0	26.5	30.0
Inrush Current [A]	7.9 @50us					
Max. Output Fault Current [A]	167 @10us					
Max. Output Overcurrent Protection [A]	75					
Displacement Power Factor	1 (Adjustable from 0.8 leading to 0.8 lagging)					
THDi [%]	<3 @Rated Output					
EFFICIENCY						
Max. MPPT Efficiency [%]	99.80	99.80	99.80	99.90	99.90	99.90
European Efficiency [%]	96.80	96.80	96.80	97.00	97.00	97.00
Max. Efficiency [%]	97.60	97.60	97.60	97.60	97.60	97.60
PROTECTION						
Insulation Monitoring	YES					
Residual Current Monitoring	YES					
DC Reverse Polarity Protection	YES					
Anti-islanding Protection	YES					
AC Short-circuit Protection	YES					
AC Overcurrent Protection	YES					
AC Overvoltage Protection	YES					
Temperature Protection	YES					
Surge Protection	Type II (DC) and Type II (AC)					
DC Switch	Optional					
AFCI	Optional					
Night Mode	Optional					
GENERAL DATA						
Dimensions (W*H*D) [mm]	358*335*155					
Weight [kg]	≤9.5					
Cooling Method	Natural					
Protective Class	I					
Ingress Protection (According to IEC60529)	IP65					
Topology	Non-isolated					
Overvoltage Category	III (AC side), II (PV side)					
Noise Emission (typical) [dB] @1m	<30					
Max. Operating Altitude [m]	3000					
Operating Temperature Range [°C]	-25 ~ +60 (Derating at +45)					
Storage Temperature Range [°C]	-40 ~ +70					
Humidity [%]	0 ~ 100 (No Condensation)					
Standby Consumption [W]	＜1 (Without night mode), ＜3 (With night mode)					
Pollution Degree	II					
Monitoring Module	Internal Wifi, and external WIFI module/4G module/LAN Module as optional					
Communication	Meter, CT, RS485, DRM (For AU only)					
Display	LCD, LED, App,Website					
STANDARD						
Certification	IEC62109, NBR-W220BR2022, AS4777, G100, CEI21, IEC61727					

*1 Max. operation power for each MPPT is 4000W.
*2 The inverter will report a error once the PV voltage is higher than 585V.