

FOX TITANIUM

30 kW Three-Phase Hybrid /AC Inverter



SUPER **FAST** SUPER **SIMPLE** SUPER **SAFE**



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.



BATTERY EXPANSION EASY UPGRADE



Easily expand your system by just add extra batteries.

There are two battery series you can choose, which enables a storage capacity of up to 66 kWh. There are Max. 10 storage inverters can be connected in parallel to allow you enlarge the system scale base on different installation requirement.



For more about the Fox ESS range, visit:
www.msolarpower.co.za



TECHNICAL SPECIFICATIONS

HYBRID INVERTER MODEL: AC INVERTER MODEL:	Q3-10.0-H Q3-10.0-A	Q3-12.0-H Q3-12.0-A	Q3-15.0-H Q3-15.0-A	Q3-20.0-H Q3-20.0-A	Q3-24.9-H Q3-24.9-A	Q3-25.0-H Q3-25.0-A	Q3-29.9-H Q3-29.9-A	Q3-30.0-H Q3-30.0-A
PV INPUT(ONLY FOR HYBRID)								
Max.Recommended DC Power [W]	15000	18000	22500	30000	37500	37500	45000	45000
Max.DC Voltage [V]					1000			
Norminal DC Operating Voltage [V]					750			
Max. Input Current [A]	16	16	32	32	32	32	32	32
Max. Short Circuit Current [A]	20	20	40	40	40	40	40	40
MPPT Voltage Range [V]					150 ~ 850			
MPPT Voltage Range [V] (full load)	230 ~ 850	270 ~ 850	170 ~ 850	230 ~ 850	280 ~ 850	280 ~ 850	340 ~ 850	340 ~ 850
Start-up Voltage [V]					160			
No. of MPP Trackers					3			
Strings Per MPP Tracker	1/1/1	1/1/1	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]	220 ~ 790	260 ~ 790	330 ~ 790	430 ~ 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
Number of Battery Input	1	1	1	1	2	2	2	2
Communication Interface					CAN			
AC OUTPUT								
Norminal AC Power [VA]	10000	12000	15000	20000	24900	25000	29900	30000
Max. Apparent AC Power [VA]	11000	13200	165000	22000	24900	27500	29900	30000
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)	16.7	20.0	25.0	33.3	37.7	41.7	45.4	45.5
Power Factor					1(Adjustable from 0.8 Leading to 0.8 Lagging)			
Export Control					YES			
AC Inrush Current [A]					15 @0.5ms			
Max. Output Fault Current [A]					150 @0.5ms			
Max. Output Overcurrent Protection [A]					77.1			
THDI [%]					<3 @Rated Power			
AC INPUT								
Max. AC Power [VA]	15000	18000	22500	30000	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)	22.7	27.3	34.1	45.5	53.0	53.0	53.0	53.0
AC Inrush Current [A]					15@0.5ms			
Power Factor					1(Adjustable from 0.8 Leading to 0.8 Lagging)			
EPS OUTPUT								
Max Apparent AC Power [VA]	10000	12000	15000	20000	25000	25000	30000	30000
Peak Apparent AC Power [VA] (60s)	12000	14400	18000	24000	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)	15.2	18.2	2.7	30.3	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	99.90
Max. Efficiency [%]	97.80	97.80	97.80	98.00	98.00	98.00	98.00	98.00
Euro-Efficiency [%]	97.20	97.20	97.20	97.30	97.30	97.30	97.30	97.30
PROTECTION								
PV Reverse Polarity Protection					YES			
Battert 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 III/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	<45	<45	<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 , 15 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.