

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.