

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

Connects to high-voltage batteries for maximum round-trip efficiency



IP65 Rated

Engineered to last with maximum flexibility. Suitable for outdoor installation



Remote Monitoring

Monitoring your system remotely via smartphone app or web portal

up to
30kW
charge/
discharge



BATTERY EXPANSION EASY UPGRADE



Easily expand your system by just adding extra batteries.

There are two battery series you can choose from, 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 based on different installation requirements.

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]	1500	1800	22500	30000	37500	37500	45000	45000
Max.DC Voltage [V]				1000				
Norminal DC Operating Voltage [V]				750				
Max. Input Current [A]1616	16	16	32	32	32	32	32	32
Max. Short Circuit Current [A]2020	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]	330 ~ 790	330 ~ 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 Input11	1	1	1	1	2	2	2	2
Communication Interface								
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	33.7	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]1500018000	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				
Parallel Operation				Lagging) 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				
Battery 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				
Reverse Connect Protection				Side) 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	<45	<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.								