



IP66 RATED



EPS FUNCTION



-20°C ~ 55°C



95% DOD



Powered by Fox ESS  
DATASHEET

## P100

A next-generation energy storage system solution with a fully-integrated inverter/charger and boasting a range of advanced features.

2.5kW ...>>> 30kW  
10kWh ...>>> 30kWh  
Off-Grid



Advanced System Monitoring  
with FoxCloud V2.0



For more information about the Fox ESS range, visit:  
[www.fox-ess.com](http://www.fox-ess.com)

# P100

ENERGY STORAGE SYSTEM



**FULLY INTEGRATED STORAGE SYSTEM**  
Seamlessly integrated, truly all-in-one solution.



**LESS IS MORE**  
Sleek, minimalist design for effortless one-step installation.



**DOUBLE OFF-GRID BACKUP CAPABILITY**  
The system experienced a 200% overload for 10 seconds.



**4MS**  
Support 4ms parallel off-grid switching.

# TECHNICAL SPECIFICATIONS

MODEL	P100-2.5-H	P100-3-H	P100-4-H	P100-5-H	P100-6-H	P100-7-H	P100-8-H	P100-9-H	P100-10-H	
<b>PV INPUT (ONLY FOR HYBRID)</b>										
Max. PV Array Power [Wp]	16000	16000	16000	16000	16000	20000	20000	20000	20000	
Max. Input Power [W]	12500	13000	14000	15000	16000	17000	18000	19000	20000	
Max. MPPT Input Power [W]	8000/8000	8000/8000	8000/8000	8000/8000	8000/8000	8000/8000/8000	8000/8000/8000	8000/8000/8000	8000/8000/8000	
Max. Input Voltage [V]	600									
Start-up Input Voltage [V]	75									
Rated Input Voltage [V]	360									
MPPT Operating Voltage Range [V]	80 - 550									
Max. Input Current [A]	20/20	20/20	20/20	20/20	20/20	20/20/20	20/20/20	20/20/20	20/20/20	
Max. Short-circuit Current [A]	25/25	25/25	25/25	25/25	25/25	25/25/25	25/25/25	25/25/25	25/25/25	
No. of MPP Trackers	2	2	2	2	2	3	3	3	3	
Strings per MPP Tracker	1									
<b>BATTERY CONNECTION</b>										
Battery Type	LFP (LiFePO <sub>4</sub> )									
Battery Energy [kWh]	10.24									
Depth of Discharge [%]	95									
Cycle Life	6000									
<b>AC INPUT AND OUTPUT (GRID)</b>										
Output	Rated Power [W]	2500	3000	4000	5000	6000	7000	8000	9000	10000
	Rated Apparent Power [VA]	2500	3000	4000	5000	6000	7000	8000	9000	10000
	Max. Apparent Power [VA]	2750	3300	4400	5500	6600	7700	8800	9900	11000
	Rated Output Current (Per Phase) [A]	11.4	13.6	18.2	22.7	27.3	31.8	36.4	40.9	45.5
	Max. AC Current (Per Phase) [A]	12.5	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0
	THDi [%]	<3 @rated power								
Input	Max. Apparent Power [VA]	3000	3600	4800	6000	7200	8400	9600	10800	12000
	Max. Input Current [A] (Per Phase)	13.6	16.4	21.8	27.3	32.7	38.2	43.6	49.1	54.5
Output & Input	Nominal Voltage [V]	220/230/240, L/N/PE								
	Nominal Frequency [Hz]	50/60, ±5								
	Power Factor	1 (Adjustable from 0.8 leading to 0.8 lagging)								
	Inrush Current [A]	15 @0.5ms								
<b>EPS OUTPUT</b>										
Max. Apparent Power [VA]	2500	3000	4000	5000	6000	7000	8000	9000	10000	
Peak Apparent Power [VA]	3000@60s	3600@60s	4800@60s	6000@60s	7200@60s	8400@60s	9600@60s	10800@60s	12000@60s	
	3750@30s	4500@30s	6000@30s	7500@30s	9000@30s	10500@30s	12000@30s	13500@30s	15000@30s	
	5000@10s	6000@10s	8000@10s	10000@10s	12000@10s	14000@10s	16000@10s	18000@10s	20000@10s	
Nominal Voltage [V]	220/230/240									
Nominal Frequency [Hz]	50/60									
Max. Output Current (Per Phase) [A]	11.4@220V	13.6@220V	18.2@220V	22.7@220V	27.3@220V	31.8@220V	36.4@220V	40.9@220V	45.5@220V	
Power Factor	1 (Adjustable)									
Switch Time [ms]	<4									
THDV [%]	<3@Linear Load									
Parallel Operation	Yes @max 3PCS									
<b>EFFICIENCY</b>										
Max. Conversion Efficiency [%]	97.60	97.60	97.62	97.62	97.62	97.62	97.62	97.62	97.62	
European Efficiency [%]	96.50	96.80	97.20	97.20	97.20	97.20	97.20	97.20	97.20	
Max. Battery Charge Efficiency (PV To BAT) @full Load [%]	97.33									
Max. Battery Charge/Discharge Efficiency (BAT To AC) @full Load [%]	96.40									
<b>PROTECTION</b>										
Insulation Monitoring	YES									
Residual Current Monitoring	YES									
DC Reverse Polarity Protection	YES									
Anti-islanding Protection	YES									
AC Short-circuit Protection	YES									
AC Overcurrent/Overvoltage Protection	YES									
DC Switch	YES									
Overvoltage Category	DC: Type II / AC: Type II									
AFCI Protection	YES									
<b>GENERAL DATA</b>										
Dimensions (W*H*D) [mm]	584*1009*197									
Weight [kg]	113									
Installation	Floor-mounted/Wall-mounted									
Cooling Method	Intelligent air cooling									
Noise Emission [dB]	<45, Average									
Max. Operating Altitude [m]	<4000@Derating exceeding 2000m									
Operating Temperature Range [°C]	-20 ~ 55									
Humidity (No Condensation) [%]	0 - 100									
Ingress Protection	IP66									
Standby Consumption [W]	<20									
Monitoring Module	WiFi, LAN, 4G									
Communication Interface	Ethernet, EMS(RS 485), Meter, WiLAN(WiFi+LAN+Bluetooth), 4G(Optional), DRM, Ripple Control, USB, BMS(CAN), SG Ready									
Display	LED, LCD, APP, Website									
Supports Dual EPS Expansion	YES									
<b>STANDARD COMPLIANCE (MORE AVAILABLE UPON REQUEST)</b>										
Safety	EN/IEC 62109-1, EN/IEC 62109-2, EN/IEC62477-1EN/IEC 62040(AU)									
EMC	EN IEC 61000-6-1:2019, EN IEC 61000-6-3:2021, EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019, IEC 62920:2017									
RED	EN 50665:2017, ENIEC 62311:2020, EN 301 489-1 V2.2.3 (2019-11), EN 301 489-17 V3.2.4 (2020-09), EN 300 328 V2.2.2(2019-07), EN 55032:2015+A11:2020+AI:2020, EN 55035:2017+A11:2020									
Grid Regulation	G99, CEI 0-21, AS/NZS 4777.2:2020, NRS 097-2-1, IEC 61727, EN 50549-1, P140/P515									
Battery Regulation	IEC62619:2022									
Transportation	UN 38.3									
Environment	ROHS, REACH, WEEE									