



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.

P100

ENERGY STORAGE SYSTEM

5kW ...>> 30kW
10kWh ...>> 120kWh
Off-Grid



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.



DC EXPANSION AND AC PARALLEL OPERATION AVAILABLE

Support 3 ET10 battery expansion units and 3 AC parallel units.



4MS

Support 4ms parallel off-grid switching.



Advanced System Monitoring
with FoxCloud 2.0



For more information about the Fox ESS range, visit:
www.fox-ess.com

TECHNICAL SPECIFICATIONS

MODEL		P100E-5-H	P100E-6-H	P100E-8-H	P100E-10-H
PV INPUT (ONLY FOR HYBRID)					
Max. PV Array Power [Wp]		16000	16000	20000	20000
Max. Input Power [W]		15000	16000	18000	20000
Max. MPPT Input Power [W]		8000/8000	8000/8000	8000/8000/8000	8000/8000/8000
Max. Input Voltage [V]				600 [1]	
Start-up Input Voltage [V]				80	
Nominal Voltage [V]				360	
MPPT Operating Voltage Range [V]				80 - 550	
Max. Input Current [A]		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
No. of MPP Trackers		2	2	3	3
Strings per MPP Tracker		1+1	1+1	1+1+1	1+1+1
BATTERY CONNECTION					
Battery Type				LFP (LiFePO ₄)	
Battery Energy [kWh]				10.24	
Max. Charge Power [W]				10000	
Depth of Discharge [%]				95	
Cycle Life				6000	
DC Expansion				Yes, max. 3*ET10 batteries	
AC INPUT AND OUTPUT (GRID)					
Output	Rated Power [W]	5000	6000	8000	10000
	Rated Apparent Power [VA]	5000	6000	8000	10000
	Max. Apparent Power [VA]	5500	6600	8800	11000
	Rated Current (per phase) [A]	22.7/21.7/20.8	27.3/26.1/25.0	36.4/34.8/33.3	45.5/43.5/41.7
	Max. Current (per phase) [A]	25.0/23.9/22.9	30.0/28.7/27.5	40.0/38.3/36.7	50.0/47.8/45.8
Input	THDi [%]			<3 @rated power	
	Max. Apparent Power [VA]	8800	11000	14500 [2]	14500 [2]
Output & Input	Max. Current [A] (per phase)	40.0	50.0	63.0 [2]	63.0 [2]
	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]			3.2 @ 1ms	
EPS OUTPUT					
Max. Apparent Power [VA]		5000	6000	8000	10000
Load Start Capability [A]				100 @2s	
Nominal Voltage [V]				220/230/240	
Nominal Frequency [Hz]				50/60, ±5	
Max. Output Current (per phase) [A]		22.7/21.7/20.8	27.3/26.1/25.0	36.4/34.8/33.3	45.5/43.5/41.7
Power Factor				1 (Adjustable from 0.8 leading to 0.8 lagging)	
Switch Time [ms]				<4	
THDV [%]				<3@Linear Load	
Parallel Operation				Yes @max 3PCS	
EFFICIENCY					
Max. Conversion Efficiency [%]				97.62	
European Efficiency [%]				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	
PROTECTION					
PV Reverse Polarity Protection				YES	
Anti-Islanding Protection				YES	
Output Short Protection				YES	
Leakage Current Protection				YES	
Insulation Resistance Detection				YES	
Overcurrent Protection				YES	
Overtemperature Protection				YES	
Earth Fault				YES	
DC/AC Surge Protection				DC: Type II /AC: Type II	
AFCI Protection				YES	
DC Switch				YES	
GENERAL DATA					
Dimensions (W*H*D) [mm]				584*1009*197	
Weight [kg]				108	
Installation				Floor-mounted/Wall-mounted	
Cooling Method				Intelligent air cooling	
Operating Temperature [°C]				-20 - 55 (Derating at 45)	
Operating Temperature [°C] (warm up function on, optional)				-25 - 55	
Storage Temperature [°C]				0 - 35	
Humidity (No Condensation) [%]				0 - 100	
Altitude [m]				<4000@Derating exceeding 2000	
Ingress Protection				IP66 (For Outdoor Use)	
Standby Consumption [W]				<20	
Noise Emission [dB]				<45, Average [3]	
Inverter Topology				Non-Isolated	
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	
Export Limit Control				YES	
Button				Capacitive Touch Sensor * 1	
STANDARD COMPLIANCE (MORE AVAILABLE UPON REQUEST)					
Safety				EN/IEC 62109-1, EN/IEC 62109-2, EN/IEC62477-1, EN/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+A1:2020, EN 55035:2017+A11:2020	
Grid Regulation				G98, 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	

[1] Voltages above 600V may damage the inverter.

[2] Settings can be configured via the app or web portal.

[3] Noise data are measured in decibels with the decorative cover installed.