



Best Choice for
Residential



N-Type

MONO-FACIAL MODULE

Type: DMxxxM10RT-54HBB

Power Range: 435 - 450 W

Max. Efficiency : 22.5 %



Aesthetics

Designed with aesthetics in mind, the module blends harmoniously with the appearance of your house while producing high energy.



Better Performance

Our modules perform better on sunny and hot days thanks to its optimized temperature coefficient.



Excellent Quality

More than 40 years' experience of manufacturing and intensive quality tests above the IEC standard ensures reliable modules and a secured investment.



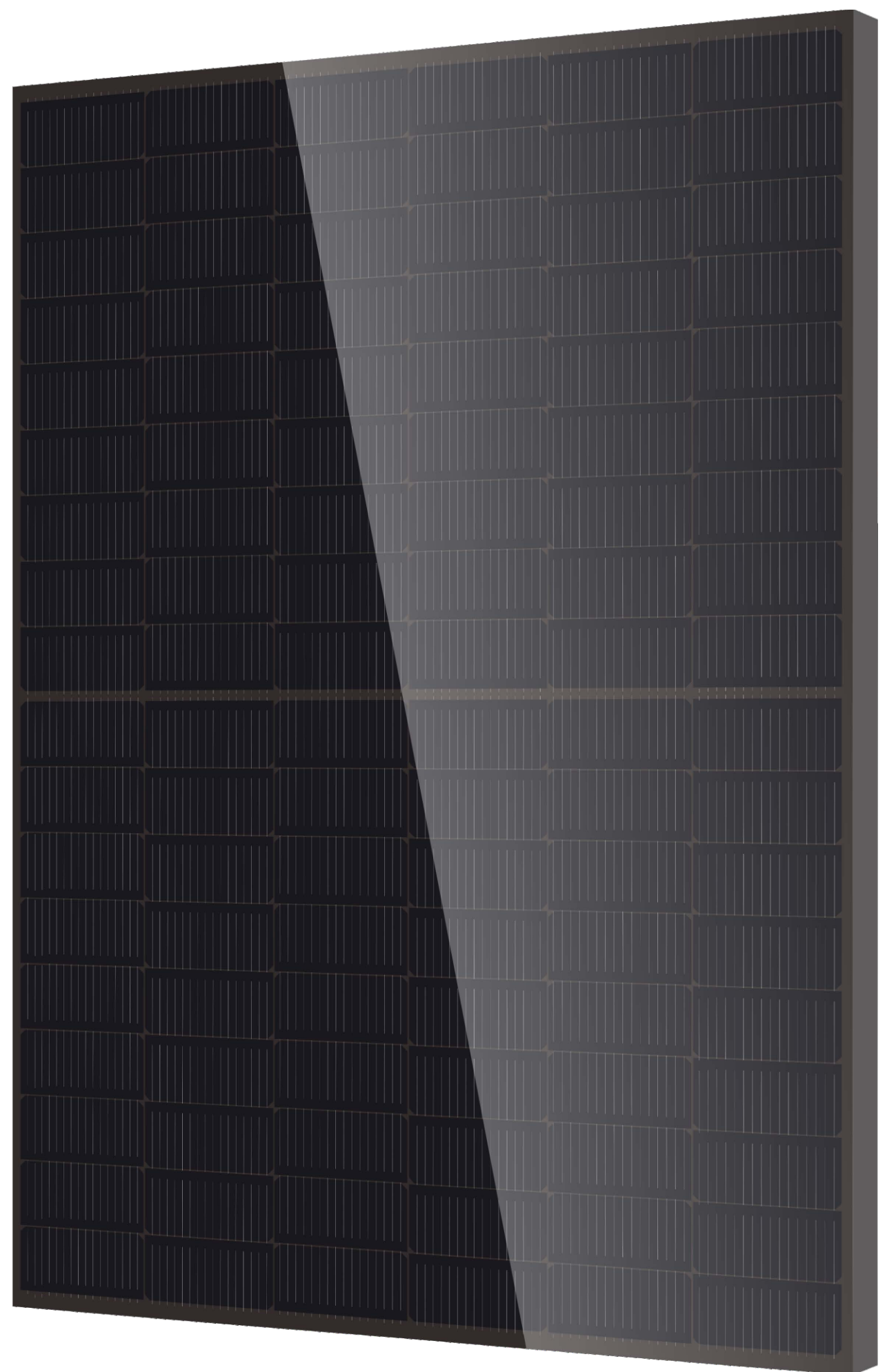
Assumption of Environmental, Social and Governance Responsibility (ESG)

DMEGC stands for his responsibility. Production is certified according to SA 8000 (ILO standards).



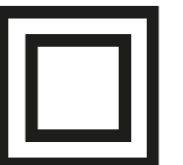
High-quality Service

We provide a customer-oriented and localized services, covering pre-sale, sale and after-sales.



Certifications

- SA 8000 ILO Standards. Social responsibility standards
- ISO 9001 Quality management system
- ISO 14001 Environmental management system
- ISO 45001 Occupational health and safety management system
- ISO 50001 Energy management system

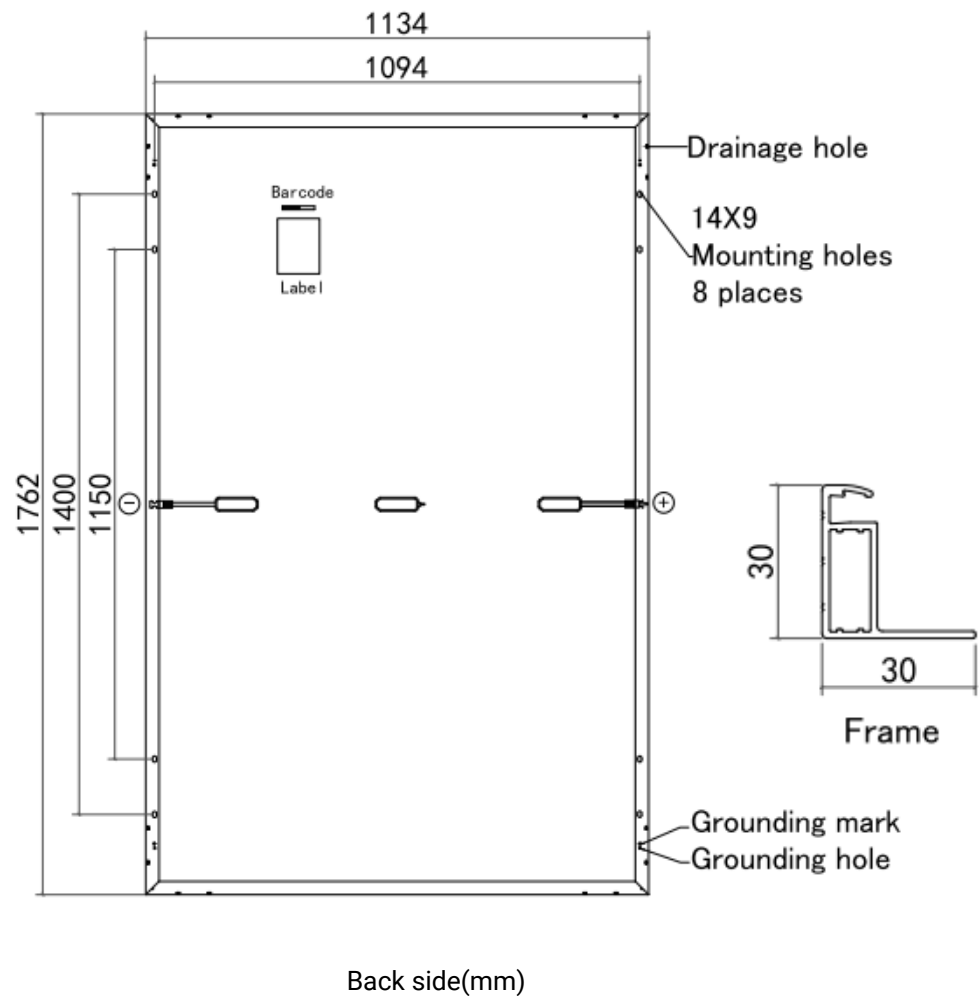


DMxxxM10RT-54HBB



Module Specification

Cell Type	N -type Mono-crystalline , 108 (6x18)
Dimensions (mm)	1762 x 1134 x 30
Weight (kg)	20.6
Front Cover	3.2 mm tempered solar glass with anti -reflective coating
Rear Cover	Backsheet
Junction Box	3 Diodes, IP68 according to IEC 62790
Cables	4mm²/Portrait: 350mm (+)/250mm(-) Landscape: 1100mm(+)/1100mm(-) Length can be customized
Connector Type	PV-ZH202B or MC4 (1000V)



Electrical Specifications¹

Module Type	DM435M10RT-54HBB		DM440M10RT-54HBB		DM445M10RT-54HBB		DM450M10RT-54HBB	
Testing Condition	STC²	NMOT³	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	435	327	440	331	445	335	450	339
Maximum Power Current (Imp/A)	13.33	10.78	13.40	10.83	13.47	10.89	13.54	10.95
Maximum Power Voltage (Vmp/V)	32.64	30.49	32.84	30.67	33.04	30.86	33.24	31.05
Short-circuit Current (Isc/A)	13.83	11.14	13.90	11.19	13.97	11.25	14.04	11.31
Open-circuit Voltage (Voc/V)	39.20	37.13	39.40	37.32	39.60	37.51	39.80	37.70
Module Efficiency STC (%)	21.8		22.0		22.3		22.5	

¹ Measurements according to IEC 60904-3, Measurement tolerance: ISC: ±4 %,VOC: ± 3 %,
² STC (Standard Test Condition): Radiation 1000 W/m², Module temperature 25℃, AM = 1.5
³ NMOT: Radiation 800 W/m², Ambient temperature 20℃, AM = 1.5, Wind Speed 1 m/s

Certifications and Warranty

Certifications	IEC 61215, IEC 61730
	Ammonia Corrosion Test: IEC 62716
	Salt Mist Corrosion Test: IEC 61701
	PID (IEC TS 62804); LeTID (IEC TS 63342)
WEEE Registration No.	Dust & Sand (IEC 60068)
	DE 50188598
Product Warranty	25 years
Peak Power Warranty	30 years linear warranty

1.) First year: min. 99 %. 2.) From the 2nd year: Max. 0.4 % degradation annually. 3.) Min. 87.4 % in the 30th year.

Operating conditions

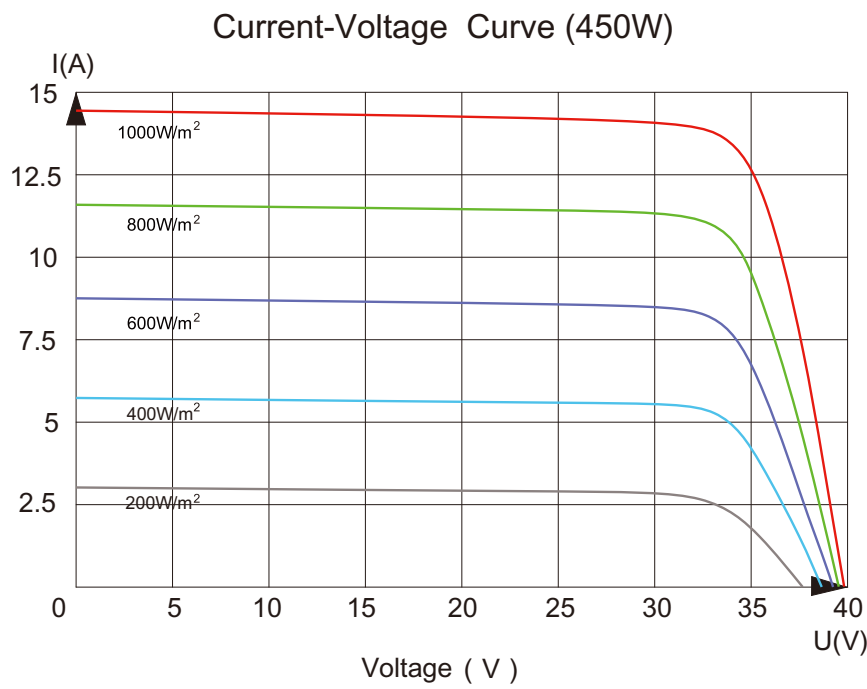
Operating Temperature (℃)	-40 to +85
Maximum System Voltage(V)	1000V DC (IEC)
Overcurrent protection rating (A)	25
Power Performance Tolerance (%)	0 / +3
Protection class	II
Max. Test Load, Push/Pull (Pa)	Snow 5400 / Wind 2400
Max. Design Load, Push/Pull (Pa)	3600 / 1600

Temperature Characteristics

Nominal Module Operating Temperature (NMOT)	42 ± 2 ℃
Temperature Coefficient of Pmax (%/ ℃)	-0.29
Temperature Coefficient of Voc (%/ ℃)	-0.25
Temperature Coefficient of Isc (%/ ℃)	+0.048

Packaging

Container	40' HQ
Pallet Dimensions(mm)	1800 × 1140 × 1250
Pieces per Pallet	36
Pieces per Container	936



Statement: The installation instructions and the warranty conditions must be followed. Due to technological progress, product parameters will be adjusted accordingly.When signing the contract, the latest data of the company shall prevail.



Hengdian Group DMEGC Magnetics Co.,Ltd.
Hengdian Industrial Zone, Dongyang City Zhejiang Province,
China 322118
Tel: 0086-579-8658-8825 Fax: 0086-579-8655-4845
E-mail: solar@dmegc.com.cn, Website: www.dmegcsolar.com

All information in this data sheet corresponds to EN 50380.Changes and errors excepted.
Status: 12/2023, Document: EN_DS-M10RT-54HBB-202312_6

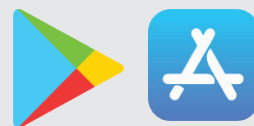
Copyright © 2023 Hengdian Group DMEGC Magnetics.
All rights reserved.



K SERIES SINGLE PHASE INVERTER

Harness the power of the sun day and night with the ground-breaking range of Hybrid & AC inverters from Fox ESS.

Full of advanced features and compatible with our very own range of high-voltage batteries, the hybrid range from Fox ESS is a new class of Inverter.



Fox ESS storage solutions are available with advanced and intuitive app based remote control and monitoring functionality.



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.



up to
10.5kW
charge/
discharge

REFINED – POWERFUL – FLEXIBLE

BATTERY EXPANSION EASY UPGRADE



Expand your system easily by simply adding additional batteries. Seven batteries can be installed in series, providing up to 33.24kWh of storage capacity.

For more about the Fox ESS range, visit:

WWW.FOX-ESS.COM



TECHNICAL SPECIFICATIONS

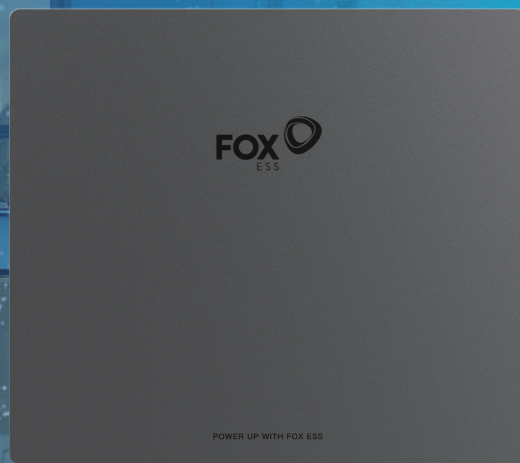
Model	KH7 KA7	KH8 KA8	KH9 KA9	KH10 KA10	KH10.5 KA10.5
ELECTRICAL CHARACTERISTICS					
Battery Type	Li-Ion				
Battery Voltage Range [V]	85 ~ 480				
Recommended Battery Voltage [V]	300				
Max. Charge Current [A]	50				
Max. Discharge Current [A]	50				
Communication Interfaces	CAN / RS485				
Reverse Connect Protection	YES				
INPUT PV (FOR KH ONLY)					
Max. Recommended DC Power [W]	10500	12000	13500	15000	15000
Max. DC Voltage [V]	600				
Norminal DC Operating Voltage [V]	360				
Max. Input Current (Input A / Input B) [A]	16 / 16 / 16 ^{II}		16 / 16 / 16 / 16 ^{II}		
Max. Short Circuit Current (Input A / Input B) [A]	20 / 20 / 20		20 / 20 / 20 / 20		
Max. Inverter Backfeed Current to the Array [mA]	0				
MPPT Voltage Range [V]	80 ~ 500				
Start-up Voltage [V]	75				
No. of MPP Trackers	3		4		
Strings Per MPP Tracker	1				
DC Disconnection Switch	Optional				
OUTPUT AC					
Norminal AC Power [VA]	7000	8000	9000	10000	10500
Max. Apparent AC power [VA]	7700	8800	9900	10500	10500
Rated Grid Voltage (AC Voltage Range) [V]	220 / 230 / 240 (180 ~ 270)				
Rated Grid Frequency [Hz]	50 / 60, ±5				
Norminal AC Current [A]	30.4	34.8	39.1	43.5	45.7
Max. AC Current [A]	33.5	38.3	43.0	45.7	47.7
Displacement Power Factor	0.8 Leading to 0.8 Lagging				
Total Harmonic Distortion (THDi, Rated Power) [%]	<3				
INPUT AC					
Max AC Power [VA]	14000	16000	18000	18000	18000
Max. AC Current [A]	60.9	69.6	78.3	78.3	78.3
Rated Grid Voltage (AC Voltage Range) [V]	220 / 230 / 240 (180 ~ 270)				
Rated Grid Frequency [Hz]	50 / 60, ±5				
EPS OUTPUT (WITH BATTERY)					
Max. EPS Power [VA]	7000	8000	9000	10000	10500
EPS Rated Voltage [V], Frequency [Hz]	220/230/240, 50 / 60				
Max. EPS Current [A]	31.8	36.4	40.9	45.5	47.7
EPS Peak Power [W]	10000, 60s		12000, 60s		
Switch Time [ms]	<20				
Total Harmonic Distortion (THDv, Linear Load) [%]	<2				
Parallel Operation	Yes @max10PCS				
EFFICIENCY					
MPPT Efficiency [%]	99.90				
Euro-efficiency [%]	97.40				
Max. Efficiency [%]	97.80				
Max. Battery Charge Efficiency (PV to BAT) (@Full Load) [%]	98.50				
Max. Battery Discharge Efficiency (BAT to AC) (@Full Load) [%]	97.00				
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-current Protection / Over-temperature Protection	YES				
Over Voltage Category	III (AC side), II (DC side)				
AC/DC Surge Protection	Type II / Type II				
AFCI Protection	Optional				
POWER CONSUMPTION					
Standby Consumption [W] (Idle)	<15				
STANDARD					
Safety	IEC62109-1 / IEC62109-2 / IEC 62477-1				
EMC	EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3				
Cetification	G99 / NRS 097-2-1 and so on				
ENVIRONMENT LIMIT					
Ingress Protection	IP65				
Protective Class	Class I				
Operating Temperature Range [°C]	-25 ~ +60 (Derating at +45)				
Humidity [%]	0 ~ 95 (Non-condensing)				
Altitude [m]	<2000				
Storage Temperature [°C]	-40 ~ +70				
Noise Emission (Typical) [dB]	<30				
DIMENSION AND WEIGHT					
Dimensions (W * H * D) [mm]	450*527*208				
Weight [kg]	29 (KH) / 27.5 (KA)				
Cooling Concept	Natural				
Topology	Non-isolated				
Communication	Meter(Optional), WIFI, 4G (Optional), DRM, USB, CT, RS485				
LCD Display	Backlight 16*4 Character				

* More technical characteristics are available on demand and customized.

^[1] The maxium generating power of each pv string is limited to 3300 watts.

Fox ESS EP11

INTEGRATED WITH HEATING FUNCTION



Smart Battery Heating

The EP11 is a high-performance, scalable battery storage system, allows for maximum flexibility, making it suitable for a broad range of storage applications.

Additional batteries can be installed in parallel allowing for a maximum storage capacity of 41.6kwh.

- Scalable to 41.6 kWh
- 90% Depth of Discharge
- Floor or Wall Mounting
- Compact & Easy Installation
- IP65 Protection Level
- High Voltage and High Efficiency



Battery Heating



Safety Reliable



Easy Installation



High Efficiency



Expandable System



90% DoD

Fox ESS EP11

HIGH VOLTAGE STORAGE BATTERY

SYSTEM NAME		EP11	
ELECTRICAL CHARACTERISTICS			
Compatible PCS		All Series of H1, KH, H3, H3-Pro, US	
Battery Type		LifePO4 Prismatic Cell	
Nominal Energy [kWh]		10.36	
Nominal Voltage [V]		384	
Operating Voltage [V]		348 ~ 438	
Max.Charge/Discharge Current [A]*1		27	
Recommend Charge Current [A]		13.5	
Peak Discharge Current [A]		65 @60s	
Peak Charge Current [A]		32.4 @5s	
Battery Pack Round-Trip Efficiency [%]		≥95	
Depth of Discharge [%]		90	
Cycle Life		≥4000	
Communication		CAN	
Display		LED*5	
Scalability		Max. 4 Units in Parallel	
OPERATING CONDITIONS			
Installation Location		Outdoor/ Indoor	
Operating Temperature [°C]	Warming deactivated:	Charge: 0 ~ 55 Discharge: -10 ~ 55	Warming activated: Charge: -25 ~ 55 Discharge: -25 ~ 55
Storage Temperature [°C]		0 ~ 35	
Cooling Method		Natural Convection	
Humidity [%]		5 ~ 95 (No Condensing)	
Altitude [m]		Max. 2,000	
MECHANICAL CHARACTERISTICS			
Dimensions (W*H*D) [mm]		710*625*147	
Weight [kg]		99±2	
CERTIFICATES			
Safety		IEC62619	
EMC		EN IEC 61000-6-1/3	
Transportation		UN38.3	
Ingress Protection		IP65	

*1, The current is affected by temperature, cell voltage and SOC.