

# EVO 10

## ENERGY STORAGE SYSTEM

A next-generation all-in-one energy storage solution with a fully integrated inverter and battery, offering a range of advanced features.



**2.5kW ...>>> 30kW**

**10kWh ...>>> 120kWh**

**Off-Grid**



Advanced System Monitoring  
with FoxCloud 2.0



### 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.



**IP66  
RATED**



**EPS  
FUNCTION**



**-20°C ~ 55°C**



**95%  
DOD**



[www.fox-ess.com](http://www.fox-ess.com)

TECHNICAL SPECIFICATIONS

| MODELL                                                              |                                      | EVO 10E<br>-2.5-H                                                                                                                                                                  | EVO 10E<br>-3-H | EVO 10E<br>-3.7-H | EVO 10E<br>-4-H | EVO 10E<br>-4.6-H | EVO 10E<br>-5-H | EVO 10E<br>-6-H | EVO 10E<br>-8-H | EVO 10E<br>-10-H |
|---------------------------------------------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-----------------|-----------------|------------------|
| PV INPUT (ONLY FOR HYBRID)                                          |                                      |                                                                                                                                                                                    |                 |                   |                 |                   |                 |                 |                 |                  |
| Max. PV Array Power [Wp]                                            |                                      | 16000                                                                                                                                                                              | 16000           | 16000             | 16000           | 16000             | 16000           | 16000           | 20000           | 20000            |
| Max. Input Power [W]                                                |                                      | 12500                                                                                                                                                                              | 13000           | 13700             | 14000           | 14600             | 15000           | 16000           | 18000           | 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   |
| 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             | 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         |
| No. of MPP Trackers                                                 |                                      | 2                                                                                                                                                                                  | 2               | 2                 | 2               | 2                 | 2               | 2               | 3               | 3                |
| Strings per MPP Tracker                                             |                                      | 1+1                                                                                                                                                                                | 1+1             | 1+1               | 1+1             | 1+1               | 1+1             | 1+1             | 1+1+1           | 1+1+1            |
| BATTERY CONNECTION                                                  |                                      |                                                                                                                                                                                    |                 |                   |                 |                   |                 |                 |                 |                  |
| Battery Type                                                        |                                      | LFP (LiFePO <sub>4</sub> )                                                                                                                                                         |                 |                   |                 |                   |                 |                 |                 |                  |
| Battery Energy [kWh]                                                |                                      | 10.24                                                                                                                                                                              |                 |                   |                 |                   |                 |                 |                 |                  |
| Max. Charge Power [W]                                               |                                      | 10000                                                                                                                                                                              |                 |                   |                 |                   |                 |                 |                 |                  |
| Depth of Discharge [%]                                              |                                      | 95                                                                                                                                                                                 |                 |                   |                 |                   |                 |                 |                 |                  |
| DC Expansion                                                        |                                      | Yes, max. 3*ET10 batteries                                                                                                                                                         |                 |                   |                 |                   |                 |                 |                 |                  |
| AC INPUT AND OUTPUT (GRID)                                          |                                      |                                                                                                                                                                                    |                 |                   |                 |                   |                 |                 |                 |                  |
| Output                                                              | Rated Power [W]                      | 2500                                                                                                                                                                               | 3000            | 3680              | 4000            | 4600              | 5000            | 6000            | 8000            | 10000            |
|                                                                     | Rated Apparent Power [VA]            | 2500                                                                                                                                                                               | 3000            | 3680              | 4000            | 4600              | 5000            | 6000            | 8000            | 10000            |
|                                                                     | Max. Apparent Power [VA]             | 2750                                                                                                                                                                               | 3300            | 3680              | 4400            | 5060              | 5500            | 6600            | 8800            | 11000            |
|                                                                     | Rated Output Current (per phase) [A] | 11.4/10.9/10.4                                                                                                                                                                     | 13.6/13.0/12.5  | 16.7/16.0         | 18.2/17.4/16.7  | 20.9/20.0/19.2    | 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. AC Current (per phase) [A]      | 12.5/12.0/11.5                                                                                                                                                                     | 15.0/14.3/13.8  | 16.7/16.0         | 20.0/19.1/18.3  | 23.0/22.0/21.1    | 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]             | 3500                                                                                                                                                                               | 4400            | 7000              | 7000            | 7000              | 8800            | 11000           | 14500 [2]       | 14500 [2]        |
|                                                                     | Max. Input Current [A] (per phase)   | 16.0                                                                                                                                                                               | 20.0            | 32.0              | 32.0            | 32.0              | 40.0            | 50.0            | 63.0 [2]        | 63.0 [2]         |
| 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]                   | 3.2 @ 1ms                                                                                                                                                                          |                 |                   |                 |                   |                 |                 |                 |                  |
| EPS OUTPUT                                                          |                                      |                                                                                                                                                                                    |                 |                   |                 |                   |                 |                 |                 |                  |
| Max. Apparent Power [VA]                                            |                                      | 2500                                                                                                                                                                               | 3000            | 3680              | 4000            | 4600              | 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]                                 |                                      | 11.4/10.9/10.4                                                                                                                                                                     | 13.6/13.0/12.5  | 16.7/16.0         | 18.2/17.4/16.7  | 20.9/20.0/19.2    | 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 [%]                                      |                                      | 97.60                                                                                                                                                                              | 97.60           | 97.60             | 97.60           | 97.62             | 97.62           | 97.62           | 97.62           | 97.62            |
| European Efficiency [%]                                             |                                      | 96.50                                                                                                                                                                              | 96.80           | 97.16             | 97.16           | 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                                                                                                                                                                              |                 |                   |                 |                   |                 |                 |                 |                  |
| 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 (Limited Performance without Warm Up)         |                                      | -20 ~ 55                                                                                                                                                                           |                 |                   |                 |                   |                 |                 |                 |                  |
| Operating Temperature (Full Performance with Warm Up)               |                                      | -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, Meter, WiLAN(WiFi+LAN+Bluetooth), 4G(Optional), DRM, Ripple Control, USB, SG Ready, Dry Contactor                                                                   |                 |                   |                 |                   |                 |                 |                 |                  |
| 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-II), 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                                                                                                                                                                            |                 |                   |                 |                   |                 |                 |                 |                  |

# TECHNICAL SPECIFICATIONS

| SYSTEM NAME                                                |                                                                                                               | ET10 |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|------|
| ELECTRICAL CHARACTERISTICS                                 |                                                                                                               |      |
| Battery Type                                               | LFP (LiFePO <sub>4</sub> )                                                                                    |      |
| Nominal Energy [kWh]                                       | 10.24                                                                                                         |      |
| Nominal Voltage [V]                                        | 204.8                                                                                                         |      |
| Operating Voltage [V]                                      | 185.6 ~ 233.6                                                                                                 |      |
| Max.Charge/Discharge Current [A] <sup>*1</sup>             | 50                                                                                                            |      |
| Recommend Charge Current [A]                               | 25                                                                                                            |      |
| Peak Discharge Current [A]                                 | 65 @60S                                                                                                       |      |
| Peak Charge Current [A]                                    | 65 @60S                                                                                                       |      |
| Battery Pack Round-Trip Efficiency [%] <sup>*2</sup>       | ≥95                                                                                                           |      |
| Depth of Discharge [%]                                     | 95                                                                                                            |      |
| Communication                                              | CAN                                                                                                           |      |
| Display                                                    | LED*5                                                                                                         |      |
| Scalability                                                | Max. 4 Units in Parallel                                                                                      |      |
| OPERATING CONDITIONS                                       |                                                                                                               |      |
| Installation Location                                      | Outdoor/ Indoor                                                                                               |      |
| Operating Temperature [°C]                                 | -20 ~ 55                                                                                                      |      |
| Operating Temperature [°C] (warm up function on, optional) | -25 ~ 55                                                                                                      |      |
| Storage Temperature [°C]                                   | 0 ~ 35                                                                                                        |      |
| Cooling Method                                             | Natural Convection                                                                                            |      |
| Humidity [%]                                               | 5 ~ 95 (No Condensation)                                                                                      |      |
| Altitude [m]                                               | Max. 4,000                                                                                                    |      |
| PROTECTION                                                 |                                                                                                               |      |
| Fire Protection Function                                   | YES                                                                                                           |      |
| MECHANICAL CHARACTERISTICS                                 |                                                                                                               |      |
| Dimensions (W*H*D) [mm]                                    | 625*770*160                                                                                                   |      |
| Weight [kg]                                                | 100                                                                                                           |      |
| CERTIFICATES                                               |                                                                                                               |      |
| Safety                                                     | IEC62619                                                                                                      |      |
| EMC                                                        | EN IEC 61000-6-1:2019, EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019,<br>EN IEC 61000-6-3:2021, IEC 62920:2017 |      |
| Transportation                                             | UN38.3                                                                                                        |      |
| Ingress Protection                                         | IP66                                                                                                          |      |
| Protective Class                                           | Class I                                                                                                       |      |

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

\*2 @25°C, 0.2C charging/discharging.