

SYSTEM PACKAGE DATA SHEET

Package 1: Fox ESS

13.30 kWp + 47.92 kWh

Large three-phase residential package for high daytime use, EV charging and substantial overnight storage.

Model mapping confirmed from the supplied package image

The 48 kWh battery representation aligns with one Fox ESS CQ6-L8 tower: seven CQ6-M modules plus one CQ6-S module, rated at 47.92 kWh. The package headline rounds this to 48 kWh.

PACKAGE 1



13.3kW SOLAR + 48kWh BATTERY

- ✓ 13.3kW Solar PV System
- ✓ x28 JA Solar N-Type Panels
- ✓ 10kW FoxESS H3 Hybrid Inverter (3-Phase)
- ✓ 48kWh Battery Storage (1 Stack)
- ✓ Online Monitoring & Mobile App
- ✓ Backup Power Capability*
- ✓ Smart Energy Management
- ✓ NETCC Approved Installation



PERFECT FOR:

Large homes, EV charging and high electricity usage.

13.30 kWp

DC solar array

10.0 kW

3-phase hybrid inverter

47.92 kWh

Battery capacity

28

475 W PV modules

Package configuration

Component	Selected model / quantity
Solar modules	28 x JA Solar JAM54D40-475/LR N-type bifacial dual-glass modules
Hybrid inverter	1 x Fox ESS H3-10.0-Smart, three-phase
Battery	1 x Fox ESS CQ6-L8 tower (7 x CQ6-M + 1 x CQ6-S)
Monitoring	Fox ESS cloud monitoring / mobile application
Backup	EPS output available; final backup architecture and essential circuits are site-specific

Capacity reconciliation

Solar: 28 x 475 W = 13,300 W (13.30 kWp). Battery: 47.92 kWh official system capacity, commercially rounded to 48 kWh. DC/AC ratio: 1.33.

Design basis

Intended for a three-phase site. Final PV string allocation must remain inside the inverter voltage and current limits at the site design temperatures. Backup capacity is not the same as whole-of-home backup; the connected load schedule must be checked.

1. Solar PV array and module data

13.30 kWp Array rating (STC)	28 Module quantity	475 W Module rating	1.33 PV / inverter ratio
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JA Solar JAM54D40-475/LR

N-type bifacial double-glass module in the DeepBlue 4.0 Pro 54-cell format. The exact 475 W electrical values below are taken from the official JA Solar datasheet.

PV module parameter	Official datasheet value
Rated maximum power (P _{max})	475 W at STC
Open-circuit voltage (V _{oc})	40.55 V
Voltage at maximum power (V _{mp})	34.18 V
Short-circuit current (I _{sc})	14.67 A
Current at maximum power (I _{mp})	13.90 A
Module efficiency	23.8%
Power tolerance	-5 W to +10 W
Cell / construction	108 half-cells; N-type; dual glass 1.6 + 1.6 mm; IP68 junction box
Dimensions / weight	1762 x 1134 x 30 mm; 22 kg
Maximum system voltage / fuse	1500 V DC / 25 A
Operating temperature	-40 C to +70 C
Temperature coefficients	P _{max} -0.290%/C; V _{oc} -0.250%/C; I _{sc} +0.045%/C
Static load	Front 3600 Pa; rear 1600 Pa
Warranty stated in datasheet	15-year product warranty; 30-year linear power warranty

Array calculation and design notes

Item	Calculation / requirement	Result
Nameplate array	28 modules x 475 W	13,300 W
Approx. module area	28 x 1.762 m x 1.134 m	55.95 m ² before gaps
Array Voc at STC	Depends on final modules per string	Must be below 1000 V inverter limit
String current	One string current approx. module I _{mp} / I _{sc}	13.90 A / 14.67 A at STC

Final string design required

The H3-10.0-Smart provides three MPPTs with one input per MPPT. Roof orientation, shading, minimum design temperature and module current must be used to determine the final string arrangement; a generic series/parallel layout should not be assumed from the package headline.

Official source

[JA Solar official JAM54D40/LR datasheet](#)

2. Hybrid inverter / energy controller data

Fox ESS H3-10.0-Smart (AU)

Three-phase high-voltage hybrid inverter with three MPPTs, 10 kW nominal AC output and an EPS backup output. Values below are for the 10 kW model in the official Australian datasheet.

Inverter parameter	Official datasheet value
Maximum recommended PV array	20,000 Wp
Maximum DC input power / voltage	18,000 W / 1000 V
MPPT operating range / start voltage	120-950 V / 140 V
MPPTs / strings	3 MPPTs; 1 + 1 + 1 string inputs
Maximum input current	20 / 20 / 20 A per MPPT
Maximum short-circuit current	25 / 25 / 25 A per MPPT
Battery voltage range	100-800 V; 50 A maximum charge/discharge current
Nominal AC output	10,000 W / 10,000 VA
Maximum apparent output	11,000 VA
Grid connection	400/230 V or 380/220 V, 3L/N/PE
Rated / maximum output current	15.2 A / 16.7 A
EPS output / transfer time	10,000 W / 10,000 VA; <20 ms transfer
Efficiency	99.90% MPPT; 97.90% maximum; 97.20% European
Enclosure / temperature	IP65; -25 C to +60 C, derating from 45 C
Dimensions / weight	600 x 450 x 226 mm; 34 kg
Cooling / noise	Natural cooling; <40 dB
Warranty stated in datasheet	10-year standard warranty

System integration notes

PV sizing is within published array allowance

The 13.30 kWp array is below the datasheet maximum recommended 20.0 kWp array size. String voltage and current compliance still requires a project-specific design.

Backup design is site-specific

EPS capability does not automatically confirm whole-home backup. Maximum continuous and surge loads, phase balance, motor starting, neutral arrangement and gateway hardware must be checked.

Official source

[Fox ESS H3-Smart Australian datasheet](#)

3. Battery storage, backup and system notes

Fox ESS CQ6-L8 high-voltage battery tower

One tower comprising seven CQ6-M battery modules and one CQ6-S master module. The official table lists 47.92 kWh for the CQ6-L8 configuration.

Battery parameter	Official datasheet value
Cell chemistry	Lithium iron phosphate (LFP)
Configuration	7 x CQ6-M + 1 x CQ6-S
Nominal / usable energy	47.92 kWh / 47.92 kWh
Nominal voltage	460.8 V
Operating voltage range	417.6-525.6 V
Rated DC power	23.04 kW
Maximum continuous current	50 A
Depth of discharge	100%
Round-trip efficiency	>95%
Communication	CAN
Installation	Indoor or outdoor; floor stand
Ingress protection	IP65
Temperature range	Charge 0 to 55 C; discharge -10 to 55 C
Dimensions / weight	660 x 360 x 1350 mm; 405.2 kg
Certifications listed	IEC 62619; UN 38.3

Space and structural assessment required

A complete tower is over 400 kg. Floor bearing capacity, access path, clearances, impact protection and compliant location must be assessed before installation.

Capacity wording

Use 47.92 kWh in technical schedules and 48 kWh only as a rounded marketing description.

Package functionality and commissioning scope

Function	Included / expected	Site-dependent requirement
Online monitoring	Manufacturer portal / mobile app	Internet, account setup and communications hardware
Backup power	Supported by selected hybrid platform	Gateway / changeover equipment and nominated compliant loads
Smart energy control	Self-use, time-of-use and export control	Correct meter / CT installation and tariff / DNSP settings
Commissioning and handover	Required	Test results, serials, photos, warranty registration and owner training

Official sources

[Fox ESS CQ6 Australian battery datasheet](#)

Technical disclaimer: This consolidated sheet is a technical reference, not a construction drawing or final design approval. Final equipment selection, string configuration, protection, cable sizing, backup circuits, clearances, network approval, firmware compatibility and installation method must be confirmed after site inspection and completed in accordance with the latest manufacturer instructions, applicable Australian Standards, DNSP requirements and local regulations. Manufacturer specifications can change without notice.