

UL9540 Energy Storage Systems Information

Important Safety Information

This document contains important safety instructions that must be followed during installation procedures (if applicable). Read and keep this document for future reference.

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of either symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

⚡ ⚠ DANGER**HAZARD OF ELECTRIC SHOCK, EXPLOSION, ARC FLASH, AND FIRE**

This document is in addition to, and incorporates by reference, the relevant product manuals for XW Pro inverter/chargers and connected batteries. Before reviewing this document, you must read the relevant product manuals. Unless specified, information on safety, specifications, installation and operation is as shown in the primary documentation received with the product. Ensure you are familiar with that information before proceeding.

Failure to follow these instructions will result in death or serious injury.

Overview

This document lists energy storage systems certified by Schneider Electric to ANSI/CAN/UL-9540:2016 Energy Storage Systems and Equipment standard and guides customer on their application. The systems covered in this document consist of the XW Pro inverter, compatible Li-ion batteries and supplementary equipment, as defined.

Refer to:

- XW Pro Installation Guide (document number 990-91228 or 990-91403)
- XW Pro Owner's Guide (document number 990-91227 or 990-91402)
- Conext Gateway documentation
- Customer documentation for the recommended batteries

The XW Pro is also used for other UL 9540 Energy Storage Systems certified by others. Systems configurations not listed in this document are out of scope of Schneider Electric's UL 9540 certification.

⚠ CAUTION**BATTERY TYPE HAZARD**

Ensure that the battery pack being used includes a compatible Battery Management System (BMS) with safety controls. Batteries with a compatible BMS for closed loop communication are listed in *Supported System Architectures and Configurations on page 4*.

Failure to follow these instructions can result in injury or equipment damage.

⚠ CAUTION**SPECIFIC ENVIRONMENT HAZARD**

- The system was intended for residential use without arc flash risk considered; a salt mist test should be considered when the ESS is installed outdoor near marine areas.
- Seismic testing should be considered for ESS installations where seismic activity applies.

Failure to follow these instructions can result in injury or equipment damage.

NOTICE

RISK OF EQUIPMENT DAMAGE

Before selecting a battery pack to use with the XW Pro inverter, MPPTs, or the accessories, be sure that the battery pack has been thoroughly tested by the battery manufacturer for safe operation for its intended application and is compatible with all Conext products. For questions or adjustments to the battery settings, contact the battery manufacturer.

Failure to follow these instructions can result in equipment damage.

Supported System Architectures and Configurations

The following diagrams depict UL 9540-certified systems with XW Pro inverters. The scope of certification includes the equipment and its interaction within the energy storage system (ESS) boundary. BMS communication with InsightHome or InsightFacility is optional. The system must be equipped with adequately-rated DC and AC breakers and/or equivalent as applicable by local codes and regulations.

Equipment combinations and associated power and energy nominal ratings are given in *Table 1*.

Figure 1 UL 9540 certified system without external contactor

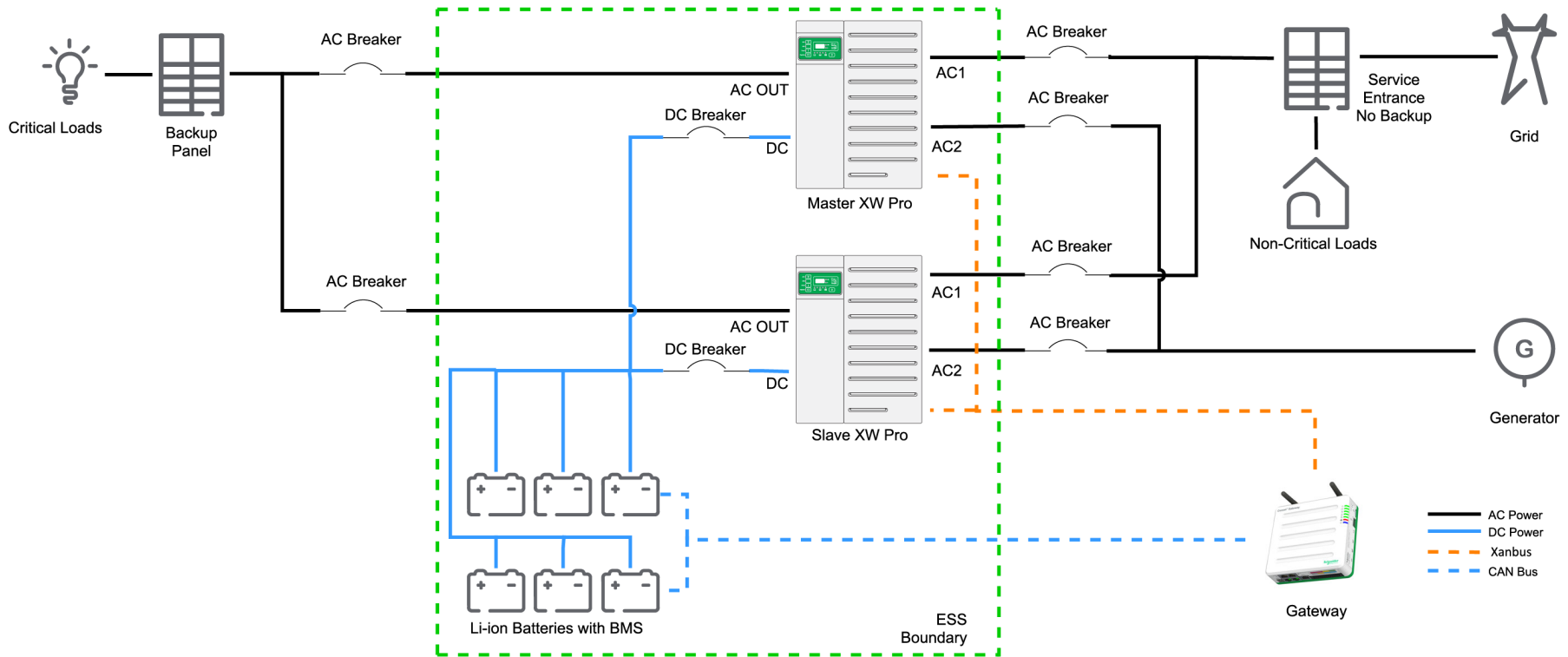


Figure 2 UL 9540 certified system with external contactor

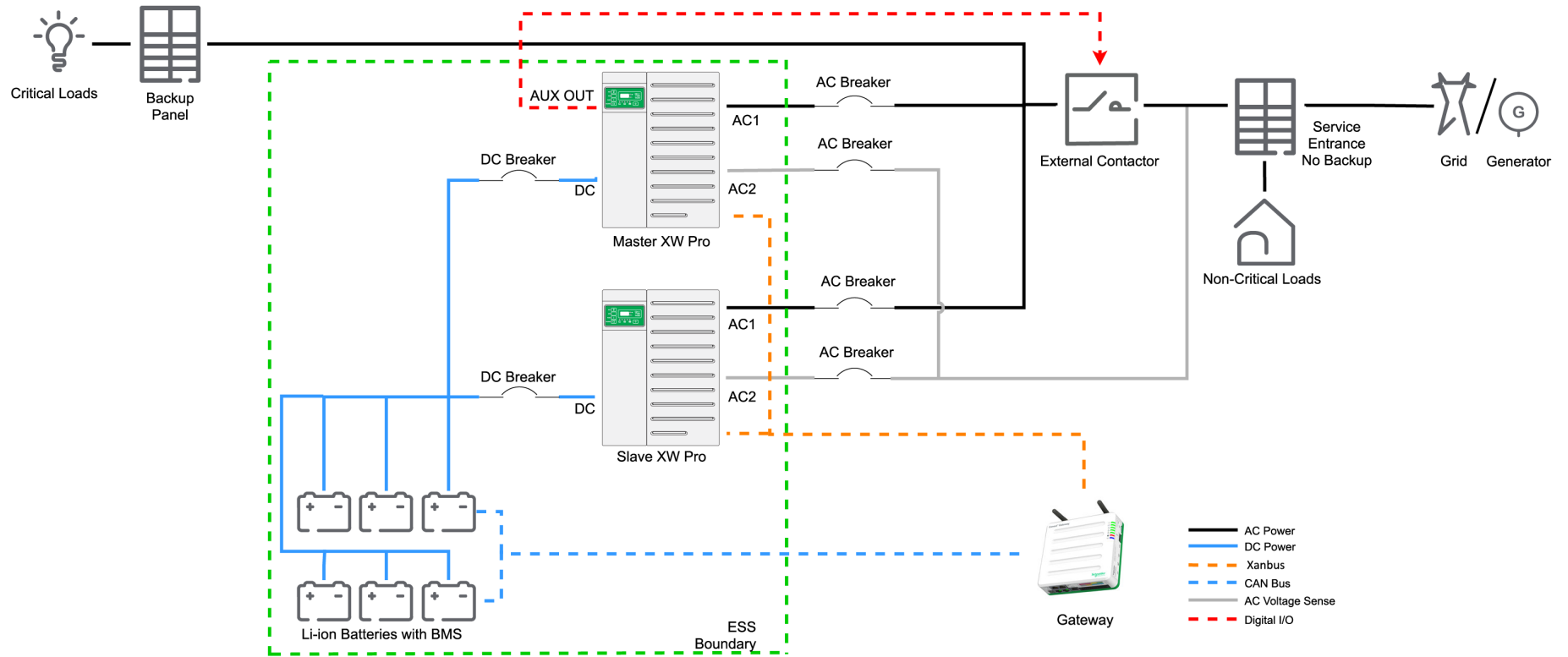


Table 1 List of UL 9540-certified combinations of equipment and their ratings

Inverter	Inverter Qty.	Battery	Battery Qty.	DC Breakers(s) ¹	DC Breaker Qty.	Max. Continuous AC Power	Energy Capacity
XW Pro 6848 NA	1	Discover AES 42-48 6650	1	865-DCBRK-250	1	4.2 kW	6.65 kWh
XW Pro 6848 NA	1	Discover AES 42-48 6650	2	865-DCBRK-250	1	6.8 kW	13.3 kWh
XW Pro 6848 NA	1	Discover AES 42-48 6650	3	865-DCBRK-250	1	6.8 kW	20 kWh
XW Pro 6848 NA	2	Discover AES 42-48 6650	2	865-DCBRK-250	2	8.4 kW	13.3 kWh
XW Pro 6848 NA	2	Discover AES 42-48 6650	3	865-DCBRK-250	2	12.6 kW	20 kWh
XW Pro 6848 NA	1	Discover AES 44-48 3000	2	865-DCBRK-250	1	3.6 kW	6 kWh
XW Pro 6848 NA	1	Discover AES 44-48 3000	3	865-DCBRK-250	1	5.4 kW	9 kWh
XW Pro 6848 NA	1	Discover AES 44-48 3000	4	865-DCBRK-250	1	6.8 kW	12 kWh
XW Pro 6848 NA	1	Discover AES 44-48 3000	5	865-DCBRK-250	1	6.8 kW	15 kWh
XW Pro 6848 NA	1	Discover AES 44-48 3000	6	865-DCBRK-250	1	6.8 kW	18 kWh
XW Pro 6848 NA	2	Discover AES 44-48 3000	5	865-DCBRK-250	2	9 kW	15 kWh
XW Pro 6848 NA	2	Discover AES 44-48 3000	6	865-DCBRK-250	2	10.8 kW	18 kWh

¹The 250 A DC Breaker part number 865-DCBRK-250 is also included with the XW Mini PDP, XW PDP, and XW Connection Kit.

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Exclusion for Documentation

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Contact Information

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