## Introduction

The Conext Quick Fit XW Pro L consists of an Inverter/Charger, Solar Charge Controllers, and a selection of Conext solar accessories that are designed to be an integral part of any utility grid-connected PV Power System. The Conext Quick Fit XW Pro L is preassembled on a backplate for quick and easy installation.

### Tools and Equipment

- Personal protective equipment (PPE)
- Motorized hand trucks and/or portable crane system
- Voltage meter
- Locks and tags
- Screwdriver and drill set (powered and manual)
- 3/8 in mounting screws (x6)

### Installation – Mounting

1. Mark and predrill the wall into base studs, 16 in (406 mm) apart.
2. At least two people are required to lift this equipment. Use of appropriate lift equipment is recommended.
3. Lift equipment must be able to support a minimum of 230 lbs (104 kg).
4. Failure to follow these instructions can result in death, serious injury, or equipment damage.

### Safety Information

- **DANGER**: Hazards exist which will result in personal injury and/or death. Failure to follow these instructions can result in death, serious injury, or equipment damage.
- **CAUTION**: Hazards exist which can result in death or serious injury.
- **WARNING**: Hazards exist which can result in death or serious injury.

### Conventions Used

- **A** Section
- **B** Step
- **C** Safety
- **D** Direction
- **E** Expand
- **F** Label

### 3/8 in Mounting Screws (x6)

- **A** Conext Gateway
- **B** Conext Battery Monitor
- **C** Conext System Control Panel
- **D** Conext XW Pro 6848 Inverter/Charger
- **E** Conext MPPT (1) 60 150 Solar Charge Controller
- **F** Conext XW Pro Mini Power Distribution Panel
- **G** Mounting holes x 6
- **H** Backplate
- **I** Lift handles x 4
- **J** Conext MPPT (2) 60 150 Solar Charge Controller

### Introduction – Wiring Connections

**HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH**

- The following materials and tools are not supplied but are required to complete the installation:
  - 3/8 in mounting screws (x6)
  - Locks and tags
  - Screwdriver and drill set (powered and manual)
  - Motorized hand trucks and/or portable crane system
  - Voltage meter
  - Cable crimper
  - Cable cutter

### Exclusion for Documentation

- **A** MAKES NO WARRANTY AS TO THE ACCURACY, SUFFICIENCY OR SUITABILITY OF ANY TECHNICAL OR OTHER INFORMATION PROVIDED IN ITS MANUALS OR OTHER DOCUMENTATION;
- **B** ASSUMES NO RESPONSIBILITY OR LIABILITY FOR LOSSES, DAMAGES, COSTS OR EXPENSES, WHETHER SPECIAL, DIRECT, INDIRECT, CONSEQUENTIAL OR INCIDENTAL, UNLESS SPECIFICALLY AGREED TO IN WRITING; SELLER

### A1 – Safety Information

- **Important Information**
  - 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.

- **WHICH MIGHT ARISE OUT OF THE USE OF SUCH INFORMATION. THE USE OF ANY SUCH INFORMATION WILL BE ENTIRELY AT THE USER’S RISK; AND**

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### Installation – Specifications

- For Indoor Use Only.

**HAZARD OF CRUSH INJURY AND EQUIPMENT DAMAGE**

- At least two people are required to lift this equipment. Use of appropriate lift equipment is recommended.
- Lift equipment must be able to support a minimum of 230 lbs (104 kg).
- For structural and seismic stability, this equipment must be mounted onto a vertical supporting surface strong enough to support a minimum of 690 lbs (313 kg), and with mounting hardware that can also support this weight.

### Conext Gateway

- The Network Terminators are located on the Conext Gateway and Conext Battery Monitor.
**D2 Installation – Lock-out and Tag-out**

**DANGER**

- HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH
- This equipment must be installed only by qualified personnel and serviced only by authorized service personnel equipped with appropriate PPE and following safe electrical work practices.
- Before opening any doors or covers:
  - Consult system diagram to identify all power sources. This equipment is energized from multiple sources—the DC inputs and the AC grid.
  - When the PV array is exposed to light, it supplies a DC voltage to this equipment.
  - De-energize, lock out, and tag out all power sources. External disconnecting means for the DC, AC, and auxiliary AC source, capable of being locked-out and tagged-out, must be provided as part of the installation. External disconnect devices are located elsewhere in the installation; they are not part of this equipment.
  - Wait at least ten minutes for internal capacitors to discharge to safe voltages; wearing appropriate PPE, verify that all circuits are de-energized using a suitably rated meter.
- Never energize this equipment with the covers removed.
- This equipment must be installed only by qualified personnel and serviced only by authorized service personnel equipped with appropriate PPE and following safe electrical work practices.

**D3 Installation – Cable Gland Installation**

**DANGER**

- Do not connect this equipment to a live power source prior to cataloging and wiring. This equipment can be energized from three sources: DC from the PV array and the battery, and AC from the grid.
- Do not connect any powered device to this equipment during installation. External disconnect devices are located elsewhere in the installation; they are not part of this equipment.

**D4 Wiring – Conext™ Mini Power Distribution Panel (PDP)**

**NOTE:** For more information, see the Conext Mini Power Distribution Panel Installation Guide (975-0735-01-01).

**Conext Battery Monitor Owner’s Guide (975-0691-01-01).**

- **WARNING**
- HAZARD OF ELECTRIC SHOCK OR FIRE
- Use a string combiner when connecting more than one PV string to the charge controller.
- As per applicable electrical codes, fuses are required when paralleling (combining) more than two PV strings.
- Fuses must be installed in a combiner box or in a PV array disconnect switch.
- These items are not provided with the charge controller.
- Failure to follow these instructions can result in death, serious injury, or equipment damage.

**D5 Wiring – Conext™ MPPT 60 150 Solar Charge Controller and Conext™ Battery Monitor**

- Connect the PV array negative (-) output to the solar charge controller ground lug and the PV array marked PV –.
- Install the charge controller terminal lugs AND the AC source box.
- Use either bolted or screw terminals. Torque according to posted guidelines.

- Install AC wires (not provided) between the L1 and L2 bypass conductor between the battery disconnect terminals and the Mini PDP’s battery terminal lugs. **NOTE:** For the Conext Battery Monitor to work, the provided shunt must be wired to the battery (see the Conext Battery Monitor Owner’s Guide for details).

**E Commissioning**

Complete the commissioning and configuration procedures in the following documents to commission each device on the Conext Quick Fit XW Pro L:

- Conext XW Inverter/Charger (Conext Pro NA) Installation Guide (975-0800-01-01)
- Conext MPPT 60 150 Solar Charge Controller Installation and Owner’s Guide (975-0400-01-01)
- Conext Gateway Owner’s Guide (975-0806-01-01)
- Conext Battery Monitor Owner’s Guide (975-0691-01-01)

**F Specifications**

- **Total weight:** 230 lb (104 kg)
- **IP rating:** NEMA Type 1
- **Mounting Location:** Indoor only

For more information, see the Install or Owner’s manual for each device.