Introduction

The Conext Quick Fit XW Pro H consists of an Inverter/Charger, Solar Charge Controller, 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 H is preassembled on a backplate for quick and easy installation.

NOTE: All components except the lift handles are supplied pre-assembled.

B1 Introduction – Wiring Connections

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

This document is in addition to, and incorporates by reference, the relevant product manuals for each individual device on the Conext Quick Fit XW Pro H. 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 for each device. Ensure you are familiar with that information before proceeding.

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

C Tools and Equipment

The following materials and tools are not supplied but are required to complete the installation:

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

D Installation – Specifications

D1 Installation – Mounting

WARNING

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 238 lbs (108 kg). For structural and seismic stability, this equipment must be mounted onto a vertical supporting surface strong enough to support a minimum of 715 lbs (325 kg), and with mounting hardware that can also support this weight.

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

- Mark and predrill the wall into three studs, 16 in (406 mm) apart between ~24in objects between ~32in objects between 600mm and 800mm (3/8 in screws, not supplied)
- Attach screw-in handles and/or attach lift handles (not supplied) to the lift equipment.
- Lift equipment must be able to support a minimum of 238 lbs (108 kg)
- 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 238 lbs (108 kg).
**D2** Installation – Lock-out and Tag-out

**DANGER**

- Do not connect this equipment to a live power source prior to cabling and wiring. This equipment
- Do-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.
- Replace all devices and covers before turning on power to this equipment.

**D3** Installation – Cable Gland Installation

**DANGER**

- Do not connect this equipment to a live power source prior to cabling 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 equipment to this device during installation. Failure to follow these instructions will result in death or serious injury.

1. Remove the PDP and MPPT covers.
2. Remove the AC and battery knockout plugs and set aside.
3. Install the cable gland strain relief (not supplied) onto the knockout hole.
4. Remove the PV knockout plugs and set aside.
5. Install the cable gland strain relief (not supplied) onto the knockout hole.

**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).

1. Install AC wires (not provided) between the L1 and L2 bypass terminal lugs AND the AC source box. Install Neutral and Ground wires (not provided) between the Neutral and Ground bus bars AND the AC source box. Route the wires through one of the knockout holes.
2. Install DC cables (not provided) 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).
3. Add UL/CSA approved strain relief clamps to knockout holes.

**D5** Wiring – Conext™ MPPT 80 600 Solar Charge Controller and Conext™ Battery Monitor

**WARNING**

- Connect the positive (+) cable from the PV disconnect to the solar charge controller terminal marked PV +.
- Connect the negative (-) output to the solar charge controller terminal marked PV -.
- Connect a grounding conductor between the solar charge controller ground lug and the PV array.

For details, see the Conext MPPT 80 600 Solar Charge Controller Installation Guide (975-0540-01-01).

1. Install the Battery Temperature Sensors (BTS) for the inverter, battery monitor, and charge controller. If stacking with other cables, stack the sensor on top of the power cable. Install sensors at the hottest area of the battery bank. For details, see the install manuals for each device. The loose ends will be attached to the PDP for transport. See markings for details.
2. Connect the supplied RJ45 connector to the Pre-Scaler. **NOTE:** Due to cable length, the Pre-Scaler must be located within 3m of the bottom edge of the Quick Fit panel. For details about Pre-Scaler and shunt connections, see the Conext Battery Monitor Owner’s Guide (975-0691-01-01).

**E** Commissioning

Complete the commissioning and configuration procedures in the following documents to commission each device on the Conext Quick Fit XW Pro H:
- Conext XW Pro Owner’s Guide (975-0801-01-01)
- Conext MPPT 80 600 Solar Charge Controller Installation Guide (975-0540-01-01)
- Conext Gateway Owner’s Guide (975-0806-01-01)
- Conext Battery Monitor Owner’s Guide (975-0691-01-01)

**F** Specifications

- **Total weight:** 238 lb (108 kg)
- **IP rating:** NEMA Type 1
- **Mounting Location:** Indoor only

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