

## Basic Installation Guide

### General Safety.

Read this guide fully, before working on this equipment. — Refer to the master installation guide if detailed information is required.

All users must be suitably trained and proficient, as certified by their employer, before working with this equipment.

### Warning.

HIGH LEAKAGE CURRENT — Earth connection essential before connecting supply.

This unit contains high voltages and is supplied by voltages from more than one source.

Ensure that external service disconnects are equipped with a fuse/breaker properly rated for the intended use of the equipment.

The unit is heavy. Exercise caution when lifting.

### Batteries.

Users must be properly equipped to handle batteries.

- Wear protective clothing
- Ensure that there is no apparent battery damage.
- Employ safe lifting techniques.
- Avoid contact with terminals.
- Wash your hands after use.

## Mounting. — Figures 1 - 3

### 1. Parts List. (The parts required will vary with the installation location)

- 1 x Cascadable chassis.
- 1 x Management module (pre fitted).
- 2 x Power Supply Units + IEC Cables.

+

#### Bagged behind Output Isolator panel.

- 4 x Blanking plugs.
- 1 x 4 segment insert strip.

#### Close Profile Mounting.

- 2 x Brackets (upper and lower).
- 4 x M8x20mm Bolts.
- 1 x Cowl.
- 4 x Brass spacers.
- 4 x Screws & Nylon washers.

#### Rack Mounting.

- 2 x Side brackets.

#### 10 x Screws.

#### Items not supplied:

(To be provided by your employer).

6 x Cable Glands – (Glands must be sourced that are appropriate for the type and rating of the cables in use).

4 x Unistrut Beams – (If required for mounting).

### 2. Assess the installation location.

1. Ensure that mains power is supplied from a properly rated and protected supply.
2. Ensure that external disconnects are isolated before making any connections.
3. Assess the most appropriate method of mounting.
4. Allow adequate room for cable entry and equipment ventilation.
5. Check that there is no apparent damage to the Cascadable chassis and modules.
6. Ensure that all necessary parts and equipment are available to complete the installation.
7. Remove any individual modules before mounting.

### 3. Wall Mounting Using Close-profile Brackets.

1. Mark a horizontal line on the wall at the required mounting height for the upper mounting bracket. Note that the unit will protrude above the bracket by at least 120mm
2. Use the upper bracket to mark the hole locations for the securing bolts.
3. Fit the bolts to the wall using suitable wall fixings and check the fit of the beam.
4. Attach the upper and lower mounting brackets to the rear of the chassis so that it will stand off away from the wall.
5. Hang the chassis on the wall from the upper bracket whilst manually supporting its weight.
6. Mark the lower bolt locations using the bolt-holes as a guide.
7. Remove the chassis from the wall.
8. Bore the bolt-holes into the wall.
9. Re-hang the chassis and fit the lower bolts using suitable wall fixings.
10. Ensure that all bolts are tight.
11. Fit 4x standoff spacers to the upper surface of the chassis.
12. Fit the cowl to the spacers using 4x screws and nylon sealing washers.

### 4. Wall Mounting Using Unistrut Beams.

1. Mark a horizontal line on the wall at the appropriate mounting height for the upper mounting beam.
2. Use the beam to mark hole locations for the beam securing bolts.
3. Mark a second line 375mm below the first.
4. Use a second beam to mark the bolthole locations.
5. Secure the first two beams to the wall.
6. Secure the remaining two beams to the rear of the unit.
7. Hang the chassis from the wall-mounted beams.
8. Fit standoff spacers to the upper surface of the chassis.
9. Fit the cowl to the spacers using 4x screws and nylon sealing washers.

### 5. Rack Mounting.

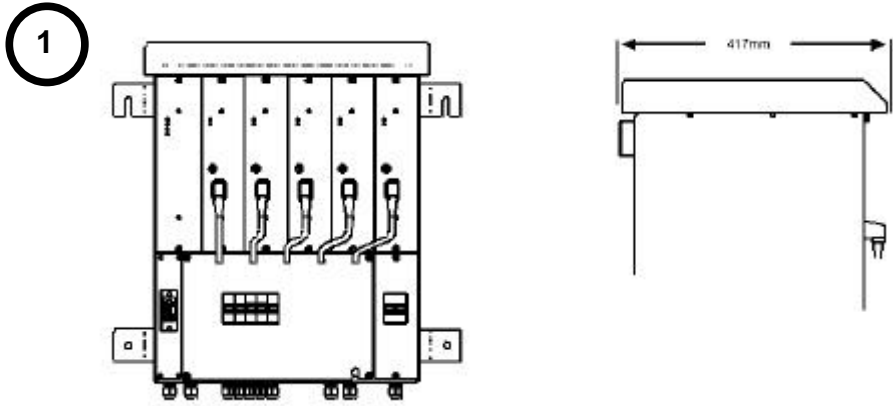
1. Ensure that the rack has sufficient room to fit the unit and allow space for cable access and equipment ventilation. (A *minimum* of 2U is required)
2. Configure the rack to fit and support the weight of the chassis.
3. Fit the two side-mounting securing brackets to the forward edge of the left and right hand faces of the chassis.
4. Install the chassis into the rack and secure using bolts and the side brackets.

## Cable Connections. — Figures 4 - 5

All user-made connections are accessed behind a removable panel in the front of the Cascadable chassis.

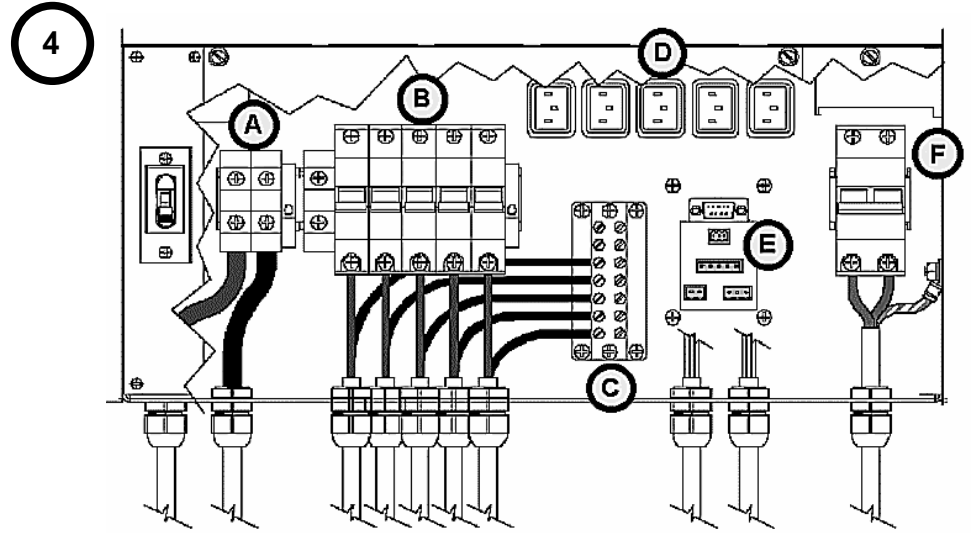
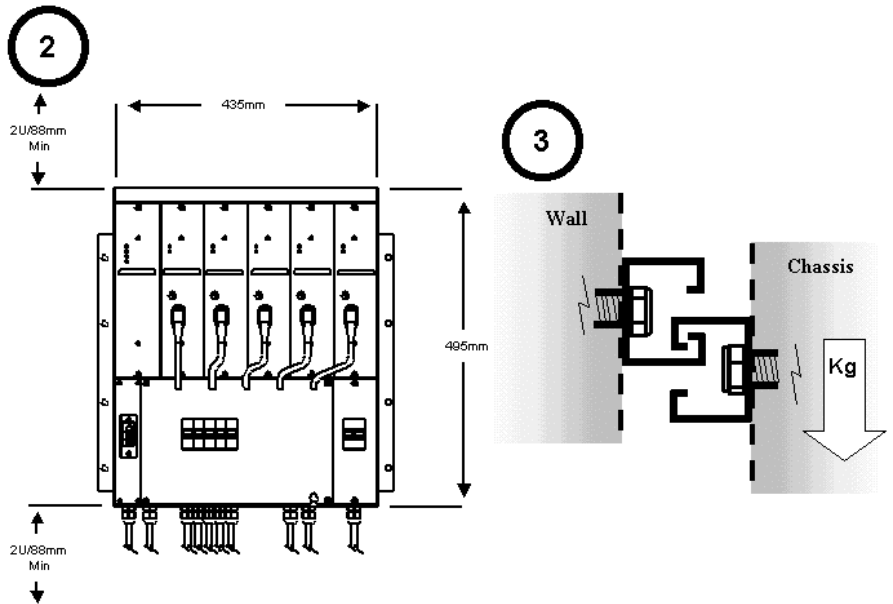
PSU connections use an IEC cable and pass through the panel. All other connections pass through the base of the chassis and are made using a variety of screw down clamp connections.

All non-IEC cables must pass through a suitable cable gland to help alleviate cable strain and prevent the ingress of foreign bodies



**Mounting**

1. For Wall mounting using Close profile brackets. Ensure that the cowl is fitted *after* mounting the unit — irreparable damage may be caused.
2. For Rack Mounting, allow a ventilation gap of at least 88mm above and below the unit.
3. Unistrut™ Beams interlock with each other. Ensure that the cowl is fitted *after* mounting the unit — irreparable damage may be caused.



**Connections.**

4.
  - A Battery Input/Output. (+ve, -ve)
  - B Output Breakers to Equipment. (+ve)
  - C Output Terminal Block to Equipment. (0V)
  - D IEC Connections to PSU.
  - E Management Card Interface Connections.
  - F Mains Power Input.\* (N, L, E)

*For maximum safety, ensure that the Earth wire is approximately 20mm longer than the Live and Neutral wires.*

\* To comply with British Standards (EN 60950), customers must ensure that the mains AC power source to the equipment is adequately protected by a suitable fuse or circuit breaker rated no greater than 60Amps.

5. Management Card Interface, pin assignments.

