



## Technical Data Sheet

### CANFORD MAINS DISTRIBUTION UNITS

**MDU19** AC MDU 12x IEC out, Powercon loop-out in, current meter

**MDU19S** AC MDU 12x IEC out, Powercon loop-out in, current meter, switch

#### DESCRIPTION

This range of twelve-way, IEC outlet, AC mains power distribution panels, with a 20amp Powercon inlet and Powercon 'loop-out' is housed in a compact 1U rackmount steel case. The loop-out feature provides an un-switched, direct loop-through power outlet to supply equipment that must remain powered when the MDU is switched off, or to supply to a second MDU. All versions have on the front panel a current meter plus fuse and bi-colour LED indication of power status for each of the output channels. Switch option models have an illuminated power rocker switch. Inlet and outlets are on the rear panel.

**NOTE:** Current drawn from the 'loop-output' must be included in the total current calculation. Care must be taken not to exceed the maximum total load of the MDU. For switched versions, the maximum total switched load is 16 amps. loop-outlet: 20amps. For un-switched versions, the maximum total load is 20 amps, loop outlet: 20 amps.

The fuses on the front panel have an adjacent bi-colour LED. Green illuminated indicates that the circuit is powered correctly. Red illuminated indicates that the fuse has failed. Outputs are numbered front and rear for easy identification and a designation-strip holder with snap-on cover is fitted on the front panel. The paper strips supplied may be inserted before or after installation; 7.5mm of printable height is available. Templates for printing designation strip labels, available as a DWG file for AutoCAD and compatible applications, can be downloaded from the appropriate product page on the Canford website.

#### AVAILABLE VERSIONS

All versions have front panels that are finished in Dawn Grey or Black.

#### Standard (MDU19, MDU19S)

The front panel has an illuminated switch or is un-switched, independent outlet fuses with status indicators. The rear panel has a 20 amp Powercon inlet, 20 amp Powercon 'loop-out' outlet and twelve 10 amp IEC outlets. An earth stud is fitted.

#### Features by model

	Switched	Sequential	Filtered
MDU19			
MDU19S	•		

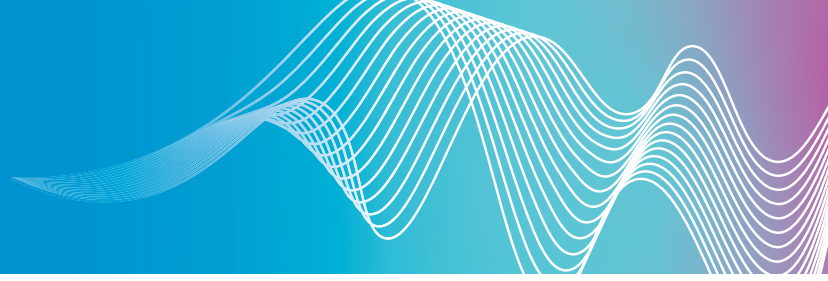
42-8394 MDU19 AC MDU 12x IEC out, Powercon loop-out in, current meter, black

42-8396 MDU19S AC MDU 12x IEC out, Powercon loop-out in, current meter, switch, green, black

42-8398 MDU19S AC MDU 12x IEC out, Powercon loop-out in, switch, red, black

#### LACING BARS

As IEC cable plugs vary enormously in size and design it is not possible to define a 'universal' connector wire retaining clip. To overcome the challenge of securing all IEC connector types both re-wireable and moulded, a single lacing-bar is fitted as standard. The stainless rods may be fitted in a variety of positions to take account of cable connector size. An additional rod may be ordered separately and fitted, which is particularly suitable where connectors of different heights are inserted or where excess cable must be doubled back. An example would be when 'double ended', fixed length, moulded AC mains cords, such as the IEC-Lock types, are used.



## INSTALLATION

THIS EQUIPMENT MUST BE INSTALLED BY SUITABLY QUALIFIED PERSONNEL

### WARNING

**HIGH LEAKAGE CURRENT  
EARTH CONNECTION ESSENTIAL  
BEFORE CONNECTING MAINS VOLTAGES  
THIS EQUIPMENT MUST BE EARTHED.  
DISCONNECT THE SUPPLY BEFORE REMOVING  
TOP COVER.**

The distribution unit should be fixed firmly in a 19" rack using suitable hardware. Appropriate attention MUST be paid to protective earthing of the rack itself. Using a suitable, 2.5<sup>2</sup> mm cable, connect one end to the earthing post on the rear of the unit. Connect the other end to permanent independent earth.

**CE** The CE mark is applied to this product in respect of the Low Voltage Directive. This apparatus complies with the safety requirements of this Directive when used as intended in domestic, commercial, light industrial and similar general indoor use. It must not be subjected to splashing or dripping

## THIS EQUIPMENT MUST BE EARTHED

The distribution units should be provided with an adequate mains power supply.

## FAULT CONDITIONS

Under normal operating conditions the Current meter will illuminate once the unit is powered. The mains rocker switch (where fitted) should be illuminated once operated. All channel "Output" LEDs should be green, whether or not a load is present.

If a front panel fuse fails because of a fault with the connected equipment the LED will illuminate red

Remove the load and repair/replace the load equipment. Replace the front panel fuse with that stipulated (see Technical Specifications below.) Re-connect the load and check that the unit is functioning correctly.

**Note that even if the panel fuse fails there will still be approximately 100V appearing on the output connector. This is limited to a few milliamps, however. It is essential that any connected equipment is removed before any repair work commences.**

## POWER WIRING AND FUSING

Replacement mains fuses must be of a 250V rated European approved type with identical current and time characteristics.

The power outlets should be cabled to the equipment to be powered using cable to suit both the load and the outlet's fuse. The fuses supplied limit the maximum output from each connector to 10 amps. This fuse rating should not be exceeded, however, smaller values may be used. Before the fuses are changed, power to the unit should be disconnected. Replace fuses only with HBC ceramic types to BS EN60127. Fuse values should be chosen to protect the cable used to wire to the powered equipment.

The power inlet should be connected using 2.5mm<sup>2</sup> cable.

## FAULT CONDITIONS

Under normal operating conditions the "Power Input" LED or mains rocker switch should be illuminated. All channel "Output" LEDs should be green, whether or not a load is present.

If a front panel fuse fails because of a fault with the connected equipment the LED will illuminate red.

Remove the load and repair/replace the load equipment. Replace the front panel fuse with that stipulated (see Technical Specifications below.) Re-connect the load and check that the unit is functioning correctly.

Note that even if the panel fuse fails there will still be approximately 100V appearing on the output connector. This is limited to a few milliamps, however. It is essential that any connected equipment is removed before any repair work commences.

## MATING CONNECTORS

Mating connectors are NOT included and should be ordered separately as required.

**Mains output connectors:** 42-153 (Bulgin)

42-054 (Schurter)

**Mains input connector:** 442-021 (Neutrik)

**Loop-out connector:** 42-022 (Neutrik)

**Moulded mains leads:** A large range are offered, see AC Mains Power Leads.

**Locking, moulded, mains leads:** Patented, locking IEC leads, see AC Mains Power Leads - IEC-Lock.

## MAINS CABLE

33-340 Flexible mains cable, 3 core, 1.5mm<sup>2</sup>, black arctic, pvc.

33-344 Flexible mains cable, 3 core, 1.5mm<sup>2</sup>, orange arctic, pvc

33-354 Flexible mains cable, 3 core, 2.5mm<sup>2</sup>, orange arctic, pvc

## ACCESSORIES

Switch guard plates: 42-0001 Grey

42-0002 Black

Additional Lacing Bar Kit: 42-0005

Spare designation-strip inserts: Label 45-3082

Clear cover 45-3092

Fasteners: 16-023 to 16-085 Rack mount fasteners

16-087 M6 bolt

16-085 Plastic cup washer

## TECHNICAL SPECIFICATION

Input voltage: 198 – 254 VAC

Output load: 10A per outlet

Total load: Switched load: 16A, loop-outlet 20A  
Un-switched load: 20A, loop-outlet 20A

Outlet fuses: 10A(T) HBC ceramic, to BS 60127

Max in-rush current: 100A for MDU-S versions

### Dimensions and weight:

	Depth excluding lacing-bar	Depth including lacing-bar	Weight (maximum)
Standard	130mm	230mm	1.7kg

All types are 1U, 19-inch rack mounting, 44 x 483 (h x w) mm.

