

# iSAFT Mains Power Distribution Unit (MPDU) - Rack Cabinet



The iSAFT-MPDU is a Power Distribution Unit (PDU), which provides full isolation between the input power source and the output. This unit is used for mains power distribution to the various SCOE racks by providing galvanic isolation and protecting both the facility supply and the SCOE racks or the Unit Under Test (UUT) from noise or other unwanted signals or parasites.

It consists of the Mains Isolation Transformer and Distribution unit, which is integrated in a 34U Rack Cabinet. Measurements for Main input and output power are provided on digital displays on the unit's front panel.

The iSAFT-MPDU transformer is designed to be powered on with low inrush current without the use of a current limiter, preventing Start-Up Issues without the possibility of power cut off from an input fuse or hardware failure on a current limiter device.

It integrates an Insulation Monitoring Device, which is activated in case of a single failure. Specifically, if any of the power lines gets in contact with the chassis of the equipment, the differential protection of the unit will cut-off the power supply for safety purposes.

## Main Features

- Class II Isolation Transformer.
- Input & output power measurement displays.
- Input Overvoltage Suppressor.
- Power supply cable (10m) with CEE input plug connector.
- Option A: Customised output sockets connectors.
- Option B: Additional separate power measurement displays for each output group.
- Option C: Customised input plug connector and power supply cable length.
- Option D: Customised output harness.

## Competitive advantages

- Start-Up low inrush current.
- Continuous insulation monitoring on the output.
- Separate ground points for input and output.
- Selectable ground schema.

## Key Benefits

- Proven industrial solution in various EU customers.
- Supplied in various EGSE / AIT testbeds for the aerospace sector.
- Customization from 10 to 50 KVA Output Power, according to power requirements.

## Standards

- EN 61558-1:2005/A1:2009
- EN 61558-2-4:2009
- EN 61011-1:2010

## Order Information

- iSAFT-MPDU-43xx (xx indicates the KVA power rating: 15, 25, 32)

## Insulation Monitoring

The iSAFT-MPDU isolation PDU device is equipped with an Isolation Monitoring Device (IMD). In case of an insulation fault, the IMD switches off completely the isolation PDU after 7 secs through the auxiliary contact, and at the same time the red LED indicating "insulation fault" lights on. The operation of the isolation PDU will be restored only when the insulation is repaired.

## Technical Data

iSAFT-MPDU-	43xx
<b>INPUT</b>	
Phase	Three
Voltage	400VAC
Frequency	50-60 Hz
Current	22,7 / 68,4 A
<b>OUTPUT</b>	
Power rating	15 to 32 KVA
Voltage	400VAC
Frequency	50-60Hz
Current	21,6 / 65A
Output Sockets	Group A - 1 x industrial 400V 32A Group B - 2 x industrial 400V 16A Group C - 5 x industrial 230V 16A Group D - 4 x domestic 230V 16A Auxiliary front - 4 x domestic 230V 16A
<b>ENVIRONMENTAL</b>	
Ambient Temperature	0°C to 30°C
Operating Humidity	< 95 %
Altitude	<1000m
Storage Temperature	10°C to +50°C
Efficiency at full load	>95%
Form Factor	34U Standalone Rack Cabinet