

# PCD 150

## Coupling and Decoupling Network for Data Control Lines

■ **The PCD 150** is used for surge coupling onto unshielded data- and signal lines according to IEC/EN standards. Damped oscillatory waves with both 100kHz and 1MHz up to 3.3kV peak as well as ring wave 100kHz with Z=200 Ohm up to 4.4kV peak can be coupled.

**Coupling and decoupling elements** are included in one box because of the sensitive impulse shape.

**Manual coupling path switching** for differential mode (transverse mode, line to line) and for common mode (longitudinal, line to earth) testing.

**Default coupling and protection elements** are breakdown avalanche diodes. Therefore the capacitive load to the EUT lines is low.

The PCD 150 can be used together with the impulse modules PIM 150 and the PIM 110 from the Surge Platform. The PSURGE 8000 Surge Platform provides all the programming functions required to perform IEC, ANSI and EN testing also without the need of a control computer.

With a 100 year history of innovation, service centers on three continents and a full staff development and support engineers, HAEFELY HIPOTRONICS is the clear choice for all your transient immunity test needs.



### FEATURES

- Damped oscillatory wave 100kHz and 1MHz
- Ring Wave 100kHz with Z=200 Ohm
- Up to 4 wires can be tested with a single unit
- Up to 8 wires can be tested with two units
- Signal Bandwidth up to some 10kHz
- Low capacitive load on the EUT lines

### BENEFITS

**International application** – Specifically designed to meet and exceed the requirements of:

- IEC/ EN 61000-4-12 Edition 1 Figure 9, 10, 13 and 14
- IEC/ EN 61000-4-18 Edition 1 Figure 7, 8, 11 and 12

**Safe and Easy** - All the sockets are safety banana plugs to ensure maximum safety to the user. The selected coupling path can be seen easily at the front panel.

**Sturdy and Reliable** - Careful component selection ensures that the PCD 150 will continue to operate under the most strenuous testing regimen.

**Report Generation** - The controller can automatically generate test reports without a computer.

**Add WinFEAT&R** control and reporting software on a host PC to collect and collate data in any format you like.

### APPLICATIONS

- Substation equipment
- Static Relays
- Other international requirements for damped oscillatory waves 100kHz / 1MHz and ring wave 100kHz with Z=200 Ohm

## TECHNICAL SPECIFICATIONS

### Coupling Part

Impulse shapes	Damped Oscillatory Wave with 100kHz and 1MHz Ring wave 100kHz, 200 Ohm
Impulse amplitude	max. 3.3kV damped oscillatory waves max. 4.4kV ring wave 100kHz
Coupling elements	Avalanche breakdown diodes

### Decoupling Part

Voltage on EUT lines	max. 56V <sub>DC</sub> or 40V <sub>AC,RMS</sub>
EUT current	max. 1A per path
EUT signal bandwidth	up to some 10kHz (dependant on system impedance)
Residual voltage at AUX input port	approx. 80V
Protection elements at AUX input port	Avalanche breakdown diodes - from each line to each other line - from each line to ground Capacitors 5nF from each line to ground

Other decoupling elements on request.

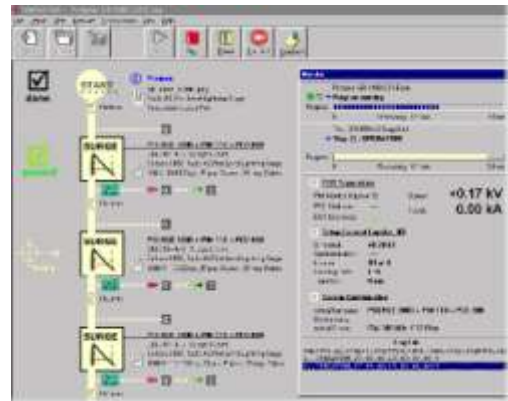
### Weights and Dimensions

24 x 16 x 12 cm (W x H x D)	2kg (net weight approx)
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### PCD 150 ART. NO. 2498040

Qty. 1	PCD 150
Qty. 1	HV cable Fischer to safety banana plugs
Qty. 1	Cable set
Qty. 5	Short circuit bridges
Qty. 1	Users Manual

### WinFEAT&R Control Window



### OPTIONS AND ACCESSORIES

PSURGE 8000	Surge Platform Mainframe Art. No. 2499000
PIM 110	Impulse module Ring Wave 100kHz Art. No. 2499030
PIM 150	Impulse module Damped Oscillatory Wave with both 100kHz and 1MHz Art. No. 2499390
WinFEAT&R	Control and reporting software. Runs under windows 98, NT, ME, 2000, XP Art. No. 2499701

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