

## PCD 150

Coupling and Decoupling Network for Data and 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 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		Decoupling Part	
Impulse shapes	Damped Oscillatory Wave with 100kHz and 1MHz Ring wave 100kHz, 200 Ohm	Voltage on EUT lines	max. 56V <sub>DC</sub> or 40V <sub>AC,RMS</sub>
Impulse amplitude	max. 3.3kV damped oscillatory waves max. 4.4kV ring wave 100kHz	EUT current	max. 1A per path
Coupling elements	Avalanche breakdown diodes	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 coupling and protection elements on request.

## Weight and Dimensions

Weight	approx. 2 kg net	Dimensions	24 x 16 x 12 cm (w x h x d)
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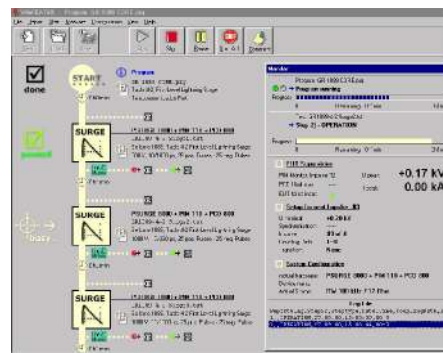
## ■ PCD 150 Art. No. 2498040 Scope of supply

- 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

## ■ 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*

## WinFEAT&R Control Window



Headquarters  
**Haefely Test AG**  
 Lehenmattstrasse 353  
 CH-4052, Basel  
 Switzerland

☎ + 41 61 373 41 11  
 ☎ + 41 61 373 45 99  
 ✉ [EMC-sales@haefely.com](mailto:EMC-sales@haefely.com)

Locate your local  
 sales representative at  
[www.haefelyEMC.com](http://www.haefelyEMC.com)



**HAEFELY** EMC  
 TECHNOLOGY

North American Office  
**Hipotronics Inc.**  
**Haefely EMC Division**  
 1650 Route 22  
 Brewster, NY 10509

☎ ++1 845 279 3644 x264  
 ☎ ++1 845 279 2467  
 ✉ [EMCsales@hubbell-haefely.com](mailto:EMCsales@hubbell-haefely.com)