

# PCD 126A

## Coupling Network for Asymmetrical and Symmetrical Data and Control Lines

■ The **PCD 126A** is used for surge coupling of 1,2/50us - 8/20us combination wave impulses onto unshielded asymmetrical data and signal lines according IEC/EN standards. It is also used for surge coupling ring wave impulses onto both unshielded asymmetrical and symmetrical data and control lines according to IEC/EN standards. Up to 6.6 kV peak value are possible. Up to 4 wires can be tested simultaneously.

**To obtain maximum flexibility** only coupling elements are included in the PCD 126. Decoupling circuits, which depends on the EUT to be tested, can be placed separately in the test setup.

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

**Default coupling elements** are capacitors, breakdown avalanche diodes and gas arrestors. The coupling elements can be selected easily. The direct coupling output allows the customer to use his own coupling elements.

The PCD 126 can be used together with the impulse modules PIM 100 and PIM 110 from the Surge Platform and the PSURGE 4010. These provide 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

- ☑ Combination wave 1,2/50us - 8/20us impulses
- ☑ Serial resistor 40 Ohm included
- ☑ Ringwave 100kHz impulses
- ☑ Up to 4 wires can be tested
- ☑ Signal Bandwidth up to some MHz
- ☑ Manual coupling path selection

### ■ Benefits

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

- IEC / EN 61000-4-5 Edition 1 Figures 10 and 11 (combination wave)
- IEC / EN 61000-4-5 Edition 2 Figures 11, 12 and 13 (combination wave)
- IEC / EN 61000-4-12 Edition 1 Figures 9, 10, 13 and 14 (ring wave)
- IEC / EN 61000-4-12 Edition 2 Figures 9, 10 and 11

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

**Sturdy and Reliable** – Careful component selection ensures that the PCD 126 will continue to operate under the most strenuous testing regimen.

**Report Generation** - The unit 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

- ☑ Unshielded asymmetrical data and signal lines
- ☑ Unshielded symmetrical data and signal lines (ring wave testing only)
- ☑ Industrial equipment
- ☑ Other international requirements for combination wave and ring wave impulses on asymmetrical data- and control lines

## ■ Technical Specifications

Impulse shapes	Combination wave 1,2/50us - 8/20us Ring wave 100kHz	Z = 2 Ohm Z = 12 Ohm, 30 Ohm and 200 Ohm
Impulse amplitude	max. 6.6kV	for both impulse shapes
Serial Resistor	1 x 40Ω	for testing according IEC 61000-4-5
Coupling elements	Capacitor 0.5uF / 3uF Avalanche breakdown diode (ABD) Avalanche breakdown diodes (ABDs) Gas arrestors Direct	for asymmetrical lines, both impulse shapes for asymmetrical lines, both impulse shapes for symmetrical lines, ring wave only for symmetrical lines, ring wave only for customer specific coupling elements
Voltage on EUT lines	max. 375V <sub>DC</sub> or 265V <sub>AC,RMS</sub> max. 72V <sub>DC</sub> or 50V <sub>AC,RMS</sub>	with capacitors as coupling elements with ABDs or gas arrestors as coupling elements
Signal bandwidth for the EUT signals	up to > 1kHz up to > 1MHz up to > 10MHz	with capacitors as coupling elements with ABDs as coupling elements with gas arrestors as coupling elements

Other coupling elements on request.

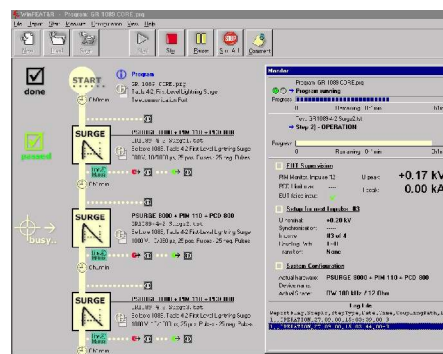
## Weight and Dimensions

Weight	approx. 12 kg net	Dimensions	45 x 19.5 x 57 cm (w x h x d)
--------	-------------------	------------	-------------------------------

## ■ PCD 126A Art. No. 249803 Scope of supply

- Qty. 1 PCD 126A
- Qty. 1 HV cable Fischer - Fischer
- Qty. 1 Cable set
- Qty. 1 Short circuit bridge
- Qty. 1 Users Manual

## WinFEAT&R Control Window



## ■ Options and Accessories

- DEC 5 Decoupling unit for symmetrical lines according IEC 61000-4-5 and IEC 61000-4-12.
- DEC 7 Decoupling unit for asymmetrical lines according IEC 61000-4-5 and IEC 61000-4-12.
- PSURGE 8000 Mainframe of the Surge Platform
- PIM 100 Combination Wave module up to 7.3kV
- PIM 110 Ring wave module up to 7.8kV with Z=12 Ohm, 30 Ohm and 200 Ohm
- ECOMPACT 4 Compact Tester up to 4.2kV

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)