

PCD 121

Coupling Network for Symmetrical Data and Control Lines

■ The **PCD 121** is used for coupling of 1,2/50us - 8/20us combination wave impulses up to 6.6kV peak onto unshielded symmetrical data and signal lines according IEC/EN standards. Up to 2 pairs / 4 wires can be tested simultaneously.

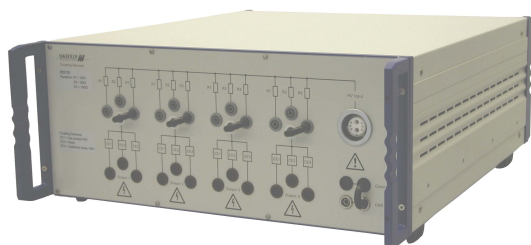
To obtain maximum flexibility only coupling elements are included in the PCD 121. Decoupling circuits, which depends on the EUT to be tested, can be placed separately in the test setup.

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

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

The PCD 121 can be used together with the impulse modules PIM 100 from the Surge Platform and the impulse generator 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 impulse
- Serial resistors included
- Up to 2 pairs / 4 wires can be tested
- Signal Bandwidth up to >10MHz
- Low capacitive load on the EUT lines
- Manual coupling path selection

■ Benefits

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

- IEC / EN 61000-4-5 Edition 1 Figure 12
- IEC / EN 61000-4-5 Edition 2 Figure 14

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 121 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 symmetrical data and signal lines
- Industrial equipment
- Other international requirements for combination wave impulses on symmetrical operated lines

■ Technical Specifications

Impulse shape	Combination wave 1,2/50µs-8/20µs	impulse shape defined at the generator output only
Impulse amplitude	max. 6.6kV	
Serial Resistor	4 x 40 Ohm 4 x 80 Ohm 4 x 160 Ohm	1 wire 2 wires / 1 pair 4 wires / 2 pairs
Coupling elements	Gas arrestors 90V Avalanche breakdown diodes (ABDs)	
Voltage on EUT lines	max. 72V _{DC} or 50V _{AC,RMS} max. 144V _{DC} or 100V _{AC,RMS}	with gas arrestors as coupling elements with ABDs as coupling elements
Signal bandwidth	up to >10MHz up to >1MHz	with gas arrestors as coupling elements with ABDs as coupling elements

Other coupling elements on request.

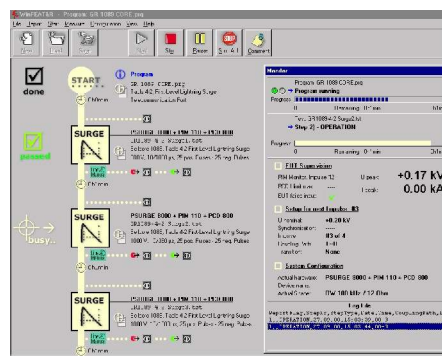
Weight and Dimensions

Weight	approx. 10 kg net	Dimensions	45 x 19.5 x 57 cm (w x h x d)
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■ PCD 121 Art. No. 249801 Scope of supply

- Qty. 1 PCD 121
- Qty. 1 HV cable Fischer -Fischer 1m
- Qty. 1 Cable set
- Qty. 5 Short circuit bridges
- Qty. 1 Users Manual

WinFEAT&R Control Window



■ Options and Accessories

- DEC 5 Decoupling unit with current compensated inductors as decoupling elements according IEC 61000-4-5 Edition 2 and ITU K.44.
- PSURGE 8000 Mainframe of the Surge Platform
- PIM 100 Combination Wave module up to 7.3kV
- PSURGE 4010 Combination wave generator up to 4.2kV
- WinFEAT&R Control and reporting software. Runs under windows 98, NT, ME, 2000, XP
- ECOMPACT 4 Compact tester up to 4.2kV

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