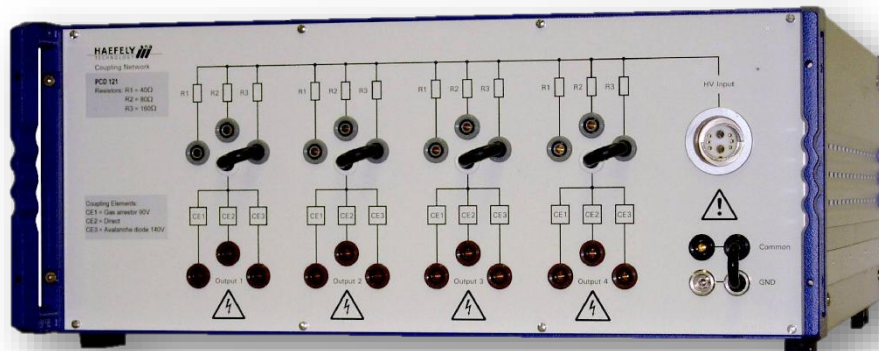


PCD 121

Coupling Network for Symmetrical Data and Control lines

Datasheet



HAEFELY

Current and voltage – our passion

General Description

The PCD 121 is used for coupling of 1.2/50 us - 8/20 us combination wave impulses up to 6.6 kV 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.

Features	Advantages
▪ Combination wave 1.2/50 us - 8/20 us impulse	☑ International Application – Specially designed to meet and exceed the requirements of: IEC / EN 61000-4-5 Edition 2 Figure 14 IEC / EN 61000-4-5 Edition 3 Figure 10
▪ Serial resistors included	☑ 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
▪ Up to 2 pairs / 4 wires can be tested	☑ Sturdy and Reliable – Careful component selection ensures that the PCD 121 will continue to operate under the most strenuous testing regimen
▪ Signal Bandwidth up to > 10 MHz	☑ 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
▪ Low capacitive load on the EUT lines	
▪ Manual coupling path selection	

Applications

- Single phase power line systems
- Surge tests with combination wave 1.2/50 us - 8/20 us .

Haefely Model	Combination Wave		Ring Wave	
	symmetric	asymmetric	symmetric	asymmetric
PCD 121	✓			
PCD 126A		✓	✓	✓
PCD121 + PCD 126A	✓	✓	✓	✓

Scope of Supply

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

Technical Data

Device		
Impulse Shape	Combination wave 1.2 / 50 μ s – 8 / 20 μ s impulse shape defined at the generator output only	
Impulse Amplitude	Max. 6.6 kV	
Serial Resistor	4 x 40 Ω	
	4 x 80 Ω	
	4 x 160 Ω	
Coupling Elements ⁽¹⁾	Gas arrester 90 V Avalanche breakdown diodes (ABDs)	
Voltage on EUT lines	Max. 72 V _{dc} or 50 V _{ac,RMS}	With gas arrester as coupling elements
	Max. 144 V _{dc} or 100 V _{ac, RMS}	With ABDs as coupling elements
Signal Bandwidth	Up to > 10 MHz	With gas arrestors as coupling elements
	Up to > 1 MHz	With ABDs as coupling elements

⁽¹⁾Other decoupling elements on request

Environmental, Mechanical and Power Supply	
Dimensions (W x D x H)	450 x 570 x 195 (17.7 x 22.4 x 7.7 in)
Weight	10 kg (22 lb)

Global Presence

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Subject to change without notice.

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