

# PIM 120 / PCD 120

## 10/700us Test System

■ **To test telecom systems** the 10/700us impulse also called telecom impulse is used. This impulse is characterized by high energy and a relative fast rise time.

The **10/700us test system** includes with the impulse module PIM 120 and the automatic coupling network PCD 120. It is used to generate and superimpose 10/700us impulses onto telecom and other communication lines.

The **PCD 120** as part of the PSURGE 8000 system is tailored to meet the ITU and IEC requirements for 2 & 4 wire interfaces. It allows the selection of both the required resistors and coupling elements and to perform a fully automatic test sequence.

**Safety is paramount** with surge impulses. The PIM 120 High Voltage connections are all linked into the System Safety Concept which prevents high voltage plugs or cables from exposing operators to potentially lethal voltages. The PCD 120 has special HV output sockets to guarantee maximum safety for the user.

PSURGE 8000 Surge Platform provides all the programming functions required to perform IEC, ITU and testing without the need of a control computer. Voltage and Current **peak measurement circuits** are used to help determine EUT PASS/FAIL criteria. The integration in the WinFEAT&R **control and reporting software** package enhances an efficient set-up and operation of this test system. Most importantly, the test load can be transferred to a computer freeing valuable resources.



### ■ Features

- ☑ **10/700us** impulse shape up to **7.4kV**
- ☑ according to **ITU K.44**
- ☑ **Fully automatic** coupling network
- ☑ **Current limit resistors** 25 Ohm, 50 Ohm, 75 Ohm and 100 Ohm
- ☑ **Coupling elements** user changeable, gas arrester 90V are standard
- ☑ Selected **resistors** and **coupling elements** clearly **shown** on the PCD 120 front panel
- ☑ WinFEAT&R software integrated

### ■ Benefits

**International application** – Specifically designed to meet and exceed the requirements of ITU and IEC / EN and tests for telecom and data line applications.

**Safe and Easy** - The interlocked HV section and the special HV sockets allow your operators to test safely and easily.

**Sturdy and Reliable** – Careful component selection ensures that the PIM 120 and PCD 120 will continue to operate under the most strenuous testing regime.

**Report Generation** - The test system can automatically generate test reports without a computer. Add WinFEAT&R control and reporting software to collect and collate data in any format you like.

**Fully flexible solution** - The PIM 120 connects to an EUT via the PCD 120. Decoupling units are also separate and can be selected according to application.

### ■ Applications

- ☑ Resistibility tests
- ☑ ITU K.20, K.21 & K.45 Telecom Interfaces
- ☑ EMC tests
- ☑ IEC 61000-4-5 Data lines
- ☑ Safety tests

## ■ Technical Specifications

### PIM 120

Impulse Voltage	0.20 – 7.4kV ±10%
Source Impedance	15 & 40 Ohms
Repetition @ Umax	10 seconds / 6 per minute

Impulse front time	V= 10us ±30% & I= 5us ±20%
Impulse duration	V= 700us ±20% & I= 320us ±20%
Impulse Polarity	Positive and Negative

### PCD 120

Impulse Shape	10/700us
Current limiting resistors	4 x 25 Ohm 4 x 50 Ohm 4 x 75 Ohm 4 x 100 Ohm
Impulse output	safety HV sockets 4mm

max. amplitude	7.4kV
Coupling elements	- gas arrestors 90V - gas arrestor // 100nF - direct
max. voltage on EUT lines	dependant on used coupling element

### Weights and Dimensions (W x H x D, net weight)

PIM 120	45 x 20 x 57 cm	29 kg
PCD120	45 x 20 x 57 cm	22 kg

## ■ PIM 120 Art. No. 249940 Scope of Supply

- Qty. 1 PIM 120 Impulse Module
- Qty. 1 HV DC Bus cable 1m
- Qty. 1 Haefely Bus cable 0.5m
- Qty. 1 Earth bonding cable 1m
- Qty. 1 Earth bonding cable 0.25m
- Qty. 1 Users Manual

## ■ PCD 120 Art. No. 249941 Scope of Supply

- Qty. 1 PCD 120 Impulse Module
- Qty. 1 HV cable set 1m
- Qty. 1 Haefely Bus cable 0.5m
- Qty. 1 Earth bonding cable 1m
- Qty. 1 Earth bonding cable 0.25m
- Qty. 1 Users Manual

## ■ Options and Accessories

- DEC 5 Decoupling unit with current compensated inductors for decoupling according to IEC 61000-4-5 and ITU K.44.
- DEC 6 4 wire decoupling unit with resistors according to ITU K.44.
- PCD 122 Manual version of the PCD 120
- WinFEAT&R Control and reporting software. Runs under windows 98, NT, ME, 2000, XP

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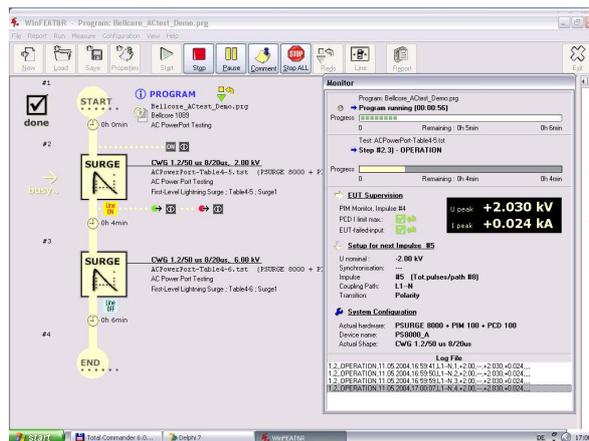


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## WinFEAT&R Control Window



## DEC 6 Decoupling unit

