



PIM 210

8/20μs and 10/1000μs Current Impulse Module

■ **The PIM 210** is used for component testing with current impulses.

For testing overvoltage protection elements such as varistors and avalanche breakdown diodes with clamping voltages up to 3kV. Both impulse shapes $8/20\mu s$ and $10/1000\mu s$ are used in tests according to the IEC and the ANSI standards. These tests include the measurement of the clamping voltage and life span tests with high energies and/or currents. The focus of the PIM 210 is the measurement of the clamping voltage.

For testing components which are exposed to impulse currents such as resistors and electrical contacts.

Resistibility tests for telecom equipment exposed to overvoltage and overcurrent can also be performed with the PIM 210.

PSURGE 8000 Surge Platform provides all the programming functions required to perform IEC, ANSI, UL and ITU testing also without the need of a control computer.

The integration in the WinFEAT&R **control and reporting software** package enhances an efficient setup and operation of this test system. Most importantly, the test load can be transferred to a computer freeing valuable resources.



■ Features

- ☑ 8/20µs current impulse from 1A up to 1.2kA
- ☑ 10/1000µs current impulse from 1A up to 11A
- ☑ Integrated test cabinet
- ☑ Clamping voltage and peak current display
- ☑ WinFEAT&R software integrated

Benefits

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

- IEC 61051, 61643
- ANSI C62.33, C62.35
- ITU K.20, K.21, K.44, K.45 (single wire only)

Safe and Easy - The HV terminals in the test cabinet are visibly short circuited when the test cabinet is opened. The interlocked HV section and the integrated controller allow operators to handle the EUTs and test them safely and easily.

Sturdy and Reliable – Careful component selection ensures that the PIM 210 will continue to operate under the most strenuous testing regimen. The semiconductor switch delivers the best reproducibility of the impulses and an extremely long life span.

Supervision - The clamping voltage and peak current into the EUT can be monitored. If the user set limits are exceeded, an alarm is given.

Report Generation - The unit controller can automatically generate test reports without a computer. Add WinFEAT&R control and reporting software on a host PC in order to collect and collate data in any format you like.

Applications

- ☑ Protection elements
- ☑ Telecom equipment
- Measuring the surge impedance of earth systems
- ☑ Many IEC, ANSI, UL & EN Product standards
- Other international requirements for current impulses

■ Technical Specifications

Impulse Shape 8/2	20 μs	Impulse Shape 10)/1000μs
Impulse front time	I= 8μs ±10%	Impulse front time	I= 10μs +20/–10%
Impulse duration	I= 20μs ±10%	Impulse duration	I= 1000μs ±20%
Current Amplitudes	1A – 1.2kA; U _{CL} =0V	Current Amplitudes	1A – 11A; U _{CL} =0V
	1A – 1kA; U _{CL} =1000V		1A - 9A; U _{CL} =1000V
	1A - 800A; U _{CL} =2000V		1A - 7A; U _{CL} =2000V
	8A - 650A; U _{CL} =3000V		
Repetition @ Umax	5 seconds / 12 per minute	Impulse Polarity	Positive and Negative
		Impulse Output	HV terminals inside the test cabinet

 U_{CL} = clamping voltage of the EUT

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

PIM 210	45 x 43 x 57 cm	approx. 35 kg (54 lbs)	
Test Cabinet	36 x 20 x 32 cm (inside)		

■ PIM 210 Art. No. 249821 Scope of Supply

Qty. 1 PIM 210 Impulse Module

Qty. 1 Warning Lamp

Qty. 1 HV DC Bus cable 1m

Qty. 1 Haefely Bus cable 1.5m

Qty. 1 Earth bonding cable 1m

Qty. 1 Earth bonding cable 0.25m

Qty. 1 User Manual

■ Options and Accessories

Test fixture for surface mounted components

Test fixture for leaded components

PIM 200 Impulse module 8/20µs 12kA and

 $10/1000 \mu s$ 110 A

PDP 8000 Differential HV Probe up to 8kV

Pearson 101 Current Probe 0.01V/A
Pearson 411 Current Probe 0.1V/A

EUTOPT.1 Optical fibre connection for the

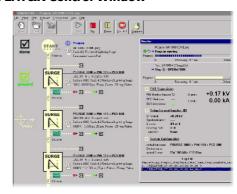
PSURGE 8000 EUT failed input

WinFEAT&R Control and reporting software.

Runs under Windows 98, NT, ME,

2000, XP

WinFEAT&R Control Window



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