

# Advanced Test Equipment Rentals - www.atecorp.com 800-404-ATEC (2832)





## **PIM 200**

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

The PIM200 is used for component testing with current impulses.

For testing overvoltage protection elements such as varistors, gas arrestors 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 200 is for the high energy tests.

For testing overcurrent protection elements such as ground fault circuit interrupters and overcurrent trip switches. These are tested with  $8/20\mu s$  and sometimes with 100kHz ringwave. These switches should not trip when an impulse current occurs. The  $8/20\mu s$  requirement can be fulfilled with the PIM 200.

**Resistibility tests for telecom equipment** exposed to overvoltage and overcurrents can also be performed with the PIM 200.

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.

PIM 200 's integration in the WinFEAT&R **control and reporting software** package and furthermore 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.



PIM200 with test cabinet (right side) shown with the PSURGE8000 controller (left)

#### **Features**

- ☑ 8/20µs current impulse from 800A up to 12kA
- ☑ 10/1000µs current impulse from 8A up to 110A
- ☑ Integrated test cabinet
- ☑ Clamping voltage display
- ☑ Peak current display
- ☑ WinFEAT&R software integrated

#### **Benefits**

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

- IEC 61008, 61009, 61051, 61643
- ANSI C62.31, C62.33, C62.35
- UL 943
- ITU K.20, K.44, K.45

**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 200 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 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 8/20μs		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	0.80 – 12.0kA; U <sub>CL</sub> =0V	Current Amplitudes	8.0 – 110A; U <sub>CL</sub> =0V
	0.80 - 10kA; U <sub>CL</sub> =1000V		8.0 – 90A; U <sub>CL</sub> =1000V
	0.80 – 8kA; U <sub>CL</sub> =2000V		8.0 – 70A; U <sub>CL</sub> =2000V
	0.80 – 6.5kA; U <sub>CL</sub> =3000V		8.0 – 60A; U <sub>CL</sub> =3000V
Repetition @ Umax	10 seconds / 6 per minute	Impulse Polarity	Positive and Negative
risp satisfies & Gilland		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 200	45 x 55 x 57 cm	approx. 40 kg (61 lbs)
Test Cabinet	36 x 20 x 32 cm (inside)	

#### **Scope of Supply**

Otv.	1	PTM	200	Impulse	Module
QLY.	т .	LTIL	200	THIPUISE	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

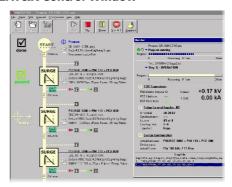
Qty. 1 Earth bonding cable 0.25m

Qty. 1 Users Manual

#### **Options & Accessories**

PIM 110	Impulse module 100kHz ringwave
PIM 210	Impulse Module 8/20 $\mu$ s 1A to 1.2kA and 10/1000 $\mu$ s 1A to 11A
PDP 8000	Differential HV Probe up to 8kV
Pearson 101	Current Probe 0.01V/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**



Headquarters

Haefely Test AG

Lehenmattstrasse 353

CH − 4052 Basel

Switzerland

+ 41 61 373 4111

Locate your local sales representative at www.haefelyEMC.com



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



+ 41 61 373 4912

sales@haefelyEMC.com







