

# PIM 5/50

5/50us - 100Ω Impulse Module for EN 50155

**EN 50155** is a European standard describing tests to be performed on Electronic equipment used on Railway rolling stock. This standard requires a special waveform not found in any other standard, the 5/50us Surge impulse. The waveform is specified as **mandatory**. The intent is to superimpose the impulse onto electrical supply lines with voltages both present and absent. Clearly, this requires the use of a suitable CDN. The PCD 100 can be used in conjunction with this module to achieve this. The 100Ω source impedance refers to the impulse generator and not the overall test system including CDN.

**Safety is paramount** with surge impulses. The PIM 5/50 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. This concept is extended to Coupling/Decoupling Networks (CDNs) connected to the PIM output.

PIM 5/50 as part of the PSURGE 8000 Surge Platform System can be used together with

**Coupling/Decoupling Networks (CDNs)** for superimposition of the impulse on AC and DC power lines.

PSURGE 8000 Surge Platform System can perform all the programming functions required to perform EN 50155 testing without the need of a control computer.

Voltage monitor circuits enable quick and easy verification of the impulse shape and amplitude.

Integration the **WinFEAT&R** software package is also possible and extends the test system function by generating a **Test Report** in Word format.

## Features

- Floating** high voltage output
- 5/50us** Impulse wave
- 2.2kV** impulse voltage
- 100Ω** source impedance
- Impulse voltage **monitor**
- Complies with EN 50155

## Benefits

**Specific Application** – Specifically designed to meet and exceed the requirements of EN 50155 tests for railway applications.

**Modular System** - The PIM 5/50 can simply be added as a module to the Haefely Surge Platform product line, minimizing new equipment purchase.

## Applications

Railway systems

EN 50155

## Technical Specifications

Impulse Voltage	0.1 –26.2kV ±3%	Impulse Rise time	V= 5us +0 / -30%
Source Impedance	100 Ohms	Impulse Duration	50us ±20%
Impulse Polarity	Positive and Negative	Repetition @ Umax	7 seconds / 8 per minute
		Impulse Output	HV connector with safety circuit

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