

# PDP 8000

## Differential Impulse Measurement Probe

■ The accurate measurement of Surge pulses for equipment **calibration** purposes requires that a Surge generator output be measured in both **Differential** and **Common modes**. Common mode measurements are relatively straightforward as the measurement is of a single output referenced to earth potential. Differential measurements however require that both the high and common of a Surge generator output are measured. This requires use of two high voltage probes and a dual channel oscilloscope capable of arithmetic functions. High voltage probes are notoriously sensitive to measurement position (vertical, horizontal), proximity of metal sheets, etc. In addition annual calibration of high voltage probes is NOT sufficient to ensure an accurate IMPULSE measurement can be made. So before each measurement, the probe(s) must be adjusted to the test equipment and measurement position. This is time consuming and requires additional test equipment or know-how not always readily available. To reduce the difficulties of Differential measurements from Surge generators, Haefely have developed an active probe specially for IMPULSE measurements on floating outputs.



### Features

- ☑ Divider Ratio **1000:1**
- ☑ Impulse measurement to **8kV**
- ☑ Impulse duration measurement to **11ms**
- ☑ Impulse risetime measurement from **450ns**
- ☑ Single **BNC output** matches all oscilloscopes
- ☑ Separate power supply
- ☑ AC/DC measurement

### Benefits

- ☑ Can be used with any standard oscilloscope
- ☑ Qualified for use with all EMC IMPULSE generators
- ☑ Simple and Easy to install
- ☑ Reduces calibration time
- ☑ Reduces calibration errors
- ☑ Defined CMRR (Common Mode Rejection Ratio)

### Application

Calibration of Surge impulse Generators

### ■ Technical Specifications

Divider Ratio	1000 : 1	Min. Impulse front time	450 ns
CMRR	≥ 46dB	Max. Impulse decay time	11 ms
Common Mode Input Impedance	30 k ohm	Input connections	4mm "banana" plugs
Differential Mode Input Impedance	60 k ohm	Output connections	50 ohm BNC connector
Max. Impulse Voltage	8000 V	Maximum AC/DC Voltage	690 Vdifferential/400Vcommon mode
Weight	1.0 kg	Dimensions (W x H x D)	260 x 160 x 62mm

Headquarters  
**Haefely Test AG**  
 Lehenmattstrasse 353  
 CH-4028 Basel  
 Switzerland

☎ + 41 61 373 4111  
 ☎ + 41 61 373 4912  
 ✉ [sales@haefelyemc.com](mailto:sales@haefelyemc.com)

Locate your local  
 sales representative at  
[www.haefelyemc.com](http://www.haefelyemc.com)



North American Office  
**Haefely Test Inc.**  
 1650 Route 22  
 Brewster, NY 10509  
 USA

☎ + 1 845 279 3644  
 ☎ + 1 845 279 2467  
 ✉ [sales@haefelyemc.com](mailto:sales@haefelyemc.com)