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## Test & Measurement

- > sales
- > rentals
- > calibration
- > repair
- > disposal

## Complimentary Reference Material

This PDF has been made available as a complimentary service for you to assist in evaluating this model for your testing requirements.

TMG offers a wide range of test equipment solutions, from renting short to long term, buying refurbished and purchasing new. Financing options, such as Financial Rental, and Leasing are also available on application.

TMG will assist if you are unsure whether this model will suit your requirements.

Call TMG if you need to organise repair and/or calibrate your unit.

If you click on the "Click-to-Call" logo below, you can call us for FREE!

TMG Corporate Website

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Product Lifecycle Management System

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# PLINE 1610

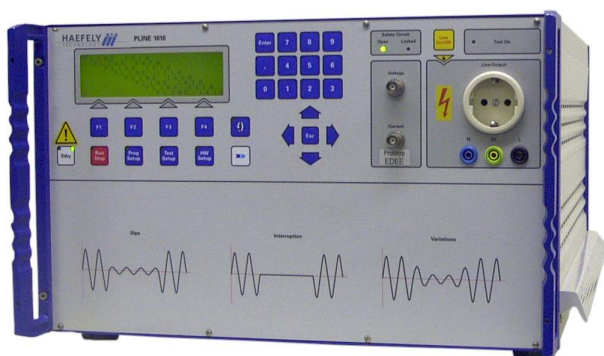
Tester for Voltage Dips, Interruptions and Variations

■ **Voltage Dips and short Interruptions** are caused by faults in the network or sudden large load changes. Voltage variations are caused by continuously varying loads connected to the network.

PLINE 1610 contains all the features expected from a top quality generator in a compact solution.

**PLINE 1610 has two integrated motorized variable transformers (variacs)**. One transformer is used to adjust the nominal voltage, for example 230V or 120V, independently from the actual mains voltage. This is essential to ensure reproducible test results. This variac is also used for performing the voltage variations.

A second variac provides the Dips voltage level, for example 40% or 80% of the nominal voltage. In opposition to most other products, **no additional** external transformers, variacs, power sources, wiring etc. are required. Therefore, this totally integrated solution is easy to use and guarantees full compliance to the IEC/EN 61000-4-11 standard.



All test parameters of the PLINE 1610 can be selected in a **surpassing wide range**, exceeding the basic standard requirements. This also ensures that special test requirements can be fulfilled without any problems.

Up to 18 tests can be stored in the unit, and these tests can be linked in any sequence to program. Up to 18 programs can be defined and stored. Along with the transition function for all basic parameters, **extremely complex test routines can also be defined and executed very comfortably**.

Using the integrated BNC-monitor outputs, actual voltage and current can be displayed on a CRO without any additional equipment required.

PLINE 1610 contains a **triple protection** against overloads and therefore it is strengthened against overcurrents or short circuits that may be caused by the EUT during testing.

## ■ Features

- Compact** and **complete** test system
- Predefined** Tests and Programs
- Testing according to **IEC/EN 61000-4-11**
- Selectable current limit to **protect EUT**
- Automatic Test Report** generation
- Flexible** to meet individual needs
- Remote control** via RS-232
- Centronics** printer interface
- Fully automatic** testing of complex test routines

## ■ Benefits

**International application** - Specifically designed to meet and exceed the requirements of IEC, EN and other standards.

**Turnkey Test System** - PLINE 1610 is complete. No additional boxes, cabling, etc. required as with most other products.

**Easy to use** - Simple test setup, no risk of operating errors.

**Fully Compliant** - PLINE 1610 Dips and Interruptions are fully compliant to the standard.

**Totally reproducible test results** - This ensures that the EUT is neither overtested nor undertested. Over- or undertesting a product may result in extensive, unnecessary costs.

**Report Generation** - Fully automated test report generation.

## ■ Applications

- Dips and Interruptions according to IEC/EN 61000-4-11 Edition 1 & Edition 2
- IEC/EN 61000-6-1
- IEC/EN 61000-6-2
- Many more international product standards
- Product development

## ■ Technical Specifications

Power part		Control part	
Output voltage range	0 to 264V	Memory for tests	18 locations
Frequency range	48 to 62 Hz	Memory for programs	18 locations
Output current at U nom	up to 16A rms continuous	Settable EUT current limit	1 to 16A
Output current at U 80%	up to 20A rms for 5s	Trigger	Auto, Manual, External
Output current at U 70%	up to 23A rms for 5s	BNC-Monitor output U	40:1
Output current at U 40%	up to 40A rms for 5s	BNC-Monitor output I	4 A/V
Inrush current capability	> 500A at 230V > 250A at 115V	Trigger Out	BNC connector 5V / 0V negative edge synchro
Dips voltage level range	0% to 80% resolution 1%	Trigger In	BNC connector 5V / 0V negative edge synchro
Synchronisation	Synchronous 0 to 360° resolution 1° Asynchronous	Transitions / ramps for	Dips voltage Phase Interruption duration Repetition time
Dips/Interrupt duration	30us to 70 min	Printer interface	Centronics
Dips/Interrupt repet. rate	3ms to 11 hours	Remote control interface	RS-232
Test time	1s to 100 hours	EUT-Failed Input	BNC connector 15V. Short circuit activates function
Output Impedance during interrupt	Selectable between low or high		
Weight	49kg	Dimensions (w x h x d)	45 x 28 x 50 cm

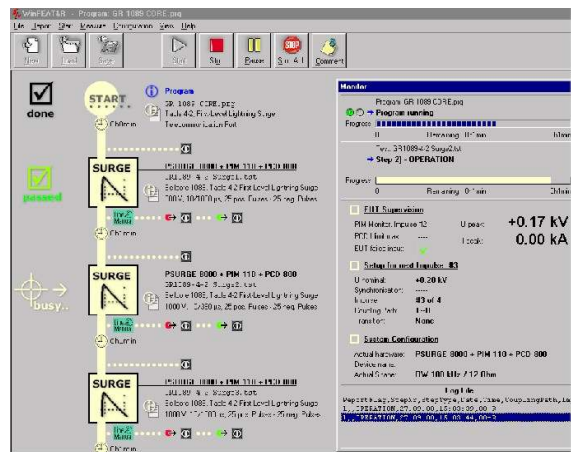
## ■ Scope of Supply Art. No. 249555

- Qty. 1 PLINE 1610 test generator
- Qty. 2 Safety circuit connector
- Qty. 1 RS 232 remote control cable
- Qty. 1 Mains cable 10A country specific
- Qty. 1 Mains cable 16A country specific
- Qty. 1 Pack of 10 spare fuses 16A F
- Qty. 1 Users Manual

## ■ Options and Accessories

- WinFEAT&R** Control and reporting software. Runs under Windows 98, NT, ME, 2000, XP
- Rack Mounting** Can be mounted in a 19" Rack for space-saving and mobility.
- MAG 100** Power frequency magnetic field test system according to IEC/EN 61000-4-8

## WinFEAT&R Control Window



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