IDAS 2823 & 2823-REF

High Precision tan δ/ power factor measuring instrument

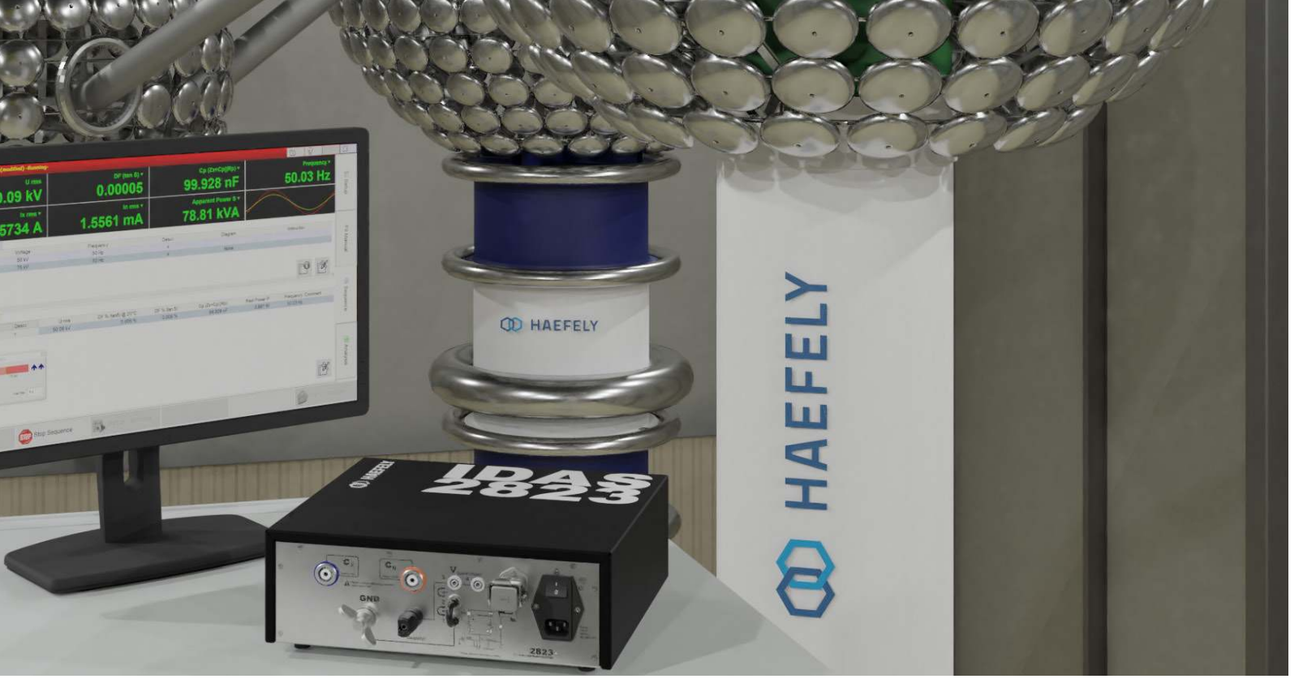
Leaflet



HAEFELY

Current and voltage – our passion

Designed by Tettex INSTRUMENTS

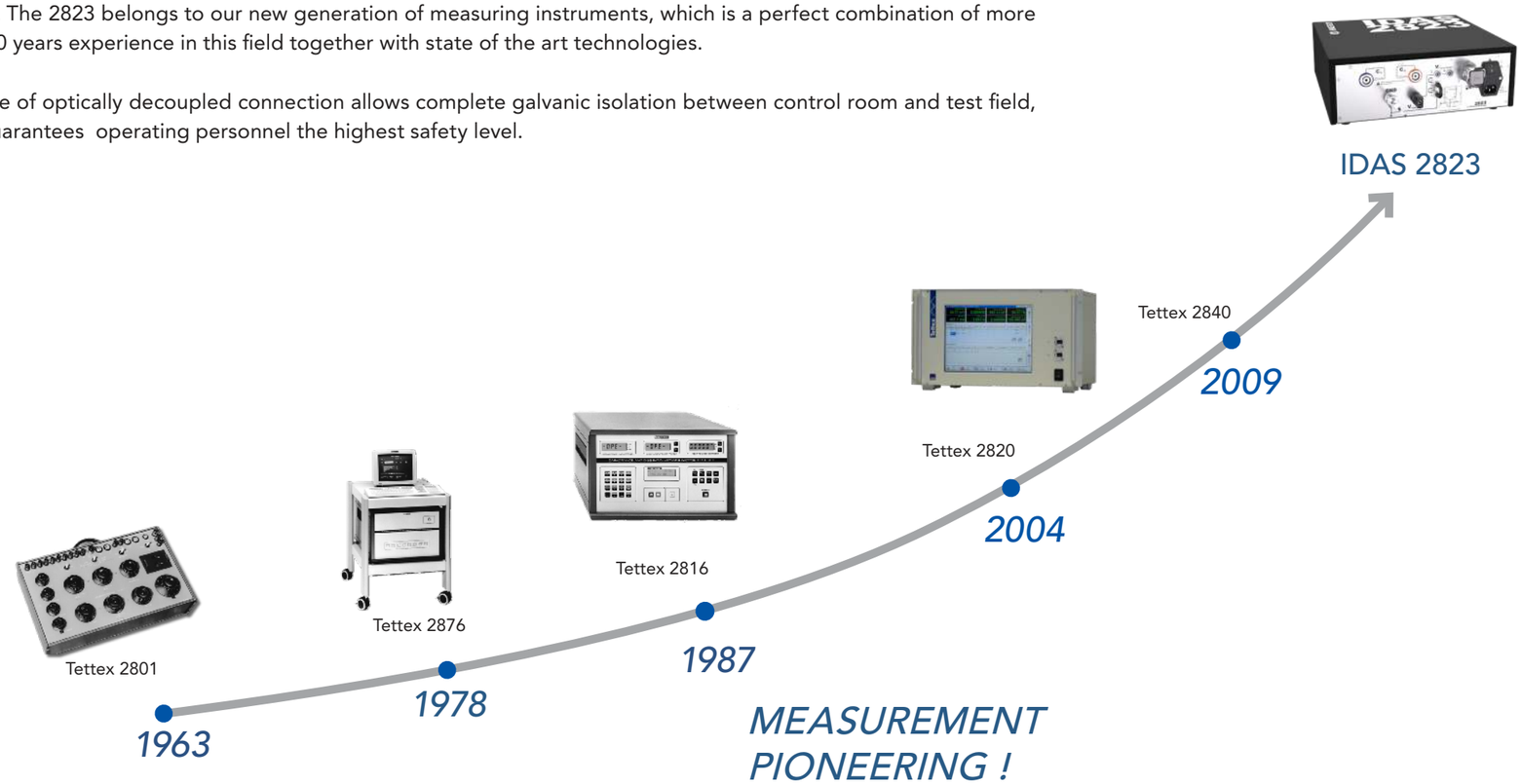


HIGH PRECISION MEASUREMENT INSTRUMENT

The High Precision tan δ / dissipation factor measuring instrument is designed for measurement of very low dielectric losses of high-voltage apparatus. HAEFELY the pioneer in high voltage testing since 1904, has been continuously developing and improving this product line since the first manual measuring bridge Tettex type-2801 was introduced in 1963.

Tettex brand, a part of Haefely, is recognized world-wide for the accuracy and reliability of our measuring instruments. The 2823 belongs to our new generation of measuring instruments, which is a perfect combination of more than 50 years experience in this field together with state of the art technologies.

The use of optically decoupled connection allows complete galvanic isolation between control room and test field, and guarantees operating personnel the highest safety level.



FEATURES

ADVANTAGES

FEATURES	ADVANTAGES
Compact, reliable and EMC hardened design, IP50.	Built to be located the HV laboratory attached to the nominal capacitor, which increases safety and reduces connecting time.
Optically decoupled from computer with industrial grade fiber optic connectors.	The galvanic isolation ensures full safety of the personnel. With the IDAS 2823, there is no electrical connection between the control room and the high voltage test field.
Up to 15A input current with auto-range.	Simple connection to test objects without external shunts and no need for a hardware reconnection due to the high input current range
Extremely low input impedance	Increased linearity and extended frequency measuring range up to 1 kHz.
LEMO type measuring cables	Backward compatible with older instruments and cabling, same connectors used for over 40 years.
Mains Powered	Connect and forget, no battery pack or recharge needed.
Highest accuracy up to 0.02 % , tan 1 x 10-5	Best device for routine or type test for oil or dry isolated components (IDAS 2823) or for reference laboratories or special applications like cables or shunt reactor losses measurement (IDAS 2823-REF).
Continuation of a long line of Haefely product line	Turnkey solution from one supplier including standard capacitors, current comparators, test cells, certified calibration, etc.

APPLICATIONS

Routine and type test of:

- Power Cables & Accessories
- Shunt Reactors losses
- Capacitors
- Instrument Transformers
- Bushings & Isolators
- Metrology Institutes
- Research & Development





2823 SOFTWARE
EASY TO USE & PROVED

Intuitive graphical user interface allows for simple operation and minimal training of test personnel.

- Test planning, preparation, execution and first assessment can be handled with just a mouse click.
- The test time for setup can be reduced significantly with definable pop-up graphics.

RUGGED fiber optic link cable

YOUR TEST OBJECT



GALVANIC ISOLATION

Fiber optic link between the 2823 and the control PC provides a complete galvanic isolation, with the following benefits:

- *The length of the fibre optic cable does not impact the measurement ratio or the calibration.*
- *Fully ensures safety of personnel. With the 2823, there is no electrical connection between the control room and the high voltage test room.*





2823 BASIC SPECIFICATIONS

	2823	2823-REF
Dissipation factor (tan δ)	± 0.1% RD ± 5 x 10^{-5}	± 0.1% RD ± 1 x 10^{-5}
Capacitance	± 0.1% RD ± 0.05 pF [1]	± 0.02% RD ± 0.01 pF [1]
Current	0.1% rdg ± 0.1 nA [1]	0.05% rdg ± 0.05 nA [1]
Current Range	10 µA .... 15 A [2]	10 µA .... 15 A [2]

[1] Temperature range : 23°C ± 5°C
[2] Current can be extended up to 10'000A with current extenders 4762, 4761 and 4764

Complete technical specifications in the 2823 Datasheet available at www.haefely.com

STANDARD PACKAGE

2823

3490101	Measuring Bridge	2823
3490102	Measuring Bridge	2823-REF

Including

1	Software Basic Package in USB stick
2	Fiber Optic - Ethernet adaptor (Media Box)
3	Industrial Fiber Optic Cable, 20 m
4	Test Report and ground cable
	Instruction Manual (Electronic, PDF)

OPTIONS

Cable sets including:

6	1 x Lemo-Lemo Orange marked C_N.	
	1 x Lemo-Lemo Blue marked - C_X	
	1 x Lemo-Alligator	
	1 x V-Cable	
	Available lengths:	
4843321	10 m length	28XX/CAB10
4843322	20 m length	28XX/CAB20
4843323	40 m length	28XX/CAB40

Software

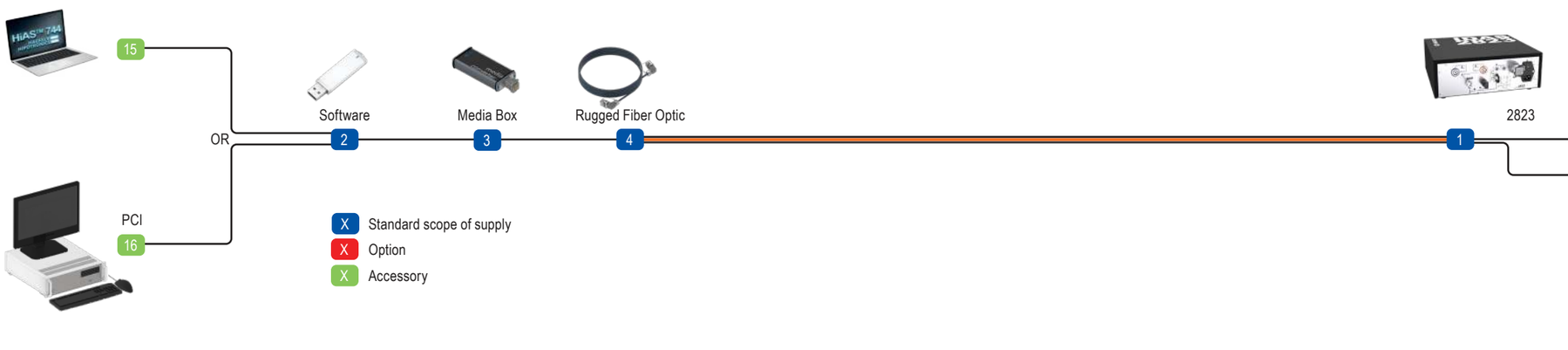
4843241	Office Software Package	28XX/SW

Extended Warranty

2 years	2823/WE2
3 years	2823/WE3



Laptop



ACCESORIES

Measurement Cables

10	Shielded Measuring cable (Orange marked - C_N),		
4841872	Lemo:		Lemo-Lemo/Orange/2
4840206	- 2 m		Lemo-Lemo/Orange/10
4840041	- 10 m		Lemo-Lemo/Orange/20
4842541	- 20 m		Lemo-Lemo/Orange/40
	- 40 m		
11	Shielded Measuring cable (blue marked - C_X), Lemo.		
4841868	- 2 m		Lemo-Lemo/Blue/2
4840203	- 10 m		Lemo-Lemo/Blue/10
4841871	- 20 m		Lemo-Lemo/Blue/20
4844065	- 40 m		Lemo-Lemo/Blue/40

Measurement cable adaptors

4841895	- Lemo Banana		Lemo – Banana
12			
4840186	- Lemo - small clamp		Lemo – Alligator
13			
4840169	- Lemo - large clamp		Lemo – Clamp
14			

Accredited Calibration

4841146	Accredited Calibration 2823	2823/AccCAL
4844207	Accredited Calibration 2823	2823-REF/AccCal

Computers

15	4840603	Laptop 15"
16		Industrial PC (EMC tested) PCI 811b

17 Nominal Capacitor (refers to)

	Type 3320 Air isolated (up to 2 kV)
	Type 3370 SF6 isolated (up to 200 kV)
	Type NK SF6 isolated (above 200 kV)

Current Extenders (refers to)

3490016	Type 4762 (up to 400 A)
3490015	Type 4761 (up to 2'000 A)
3490017	Type 4764 (up to 10'000 A)

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This document has been drawn up with the utmost care. We cannot, however, guarantee that it is entirely complete, correct or up-to-date. Subject to change without notice.

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HAEFELY
Current and voltage – our passion

HV HIGH VOLTAGE
IN INSTRUMENT
EM EMC

precision. swiss made.