MEASURING EQUIPMENT
MiniLog2
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MiniLog2 Datalogger and GPS Time Switch for CP

2-Channels (DC + AC = 4 values) · Microvolt · AC Filter · max. 1,000 measurements / sec. · 1,300,000 Values (4 MByte)
GPS Time Switch 15 A relay · Li-Ion battery for 1 month cont. switching · DCVG + CIPS with GPS · Waterproof IP68

General

The new MiniLog2 is a waterproofed universal measuring instrument with LCD and keyboard designed for CP measurement tasks. Used in data logger mode, the MiniLog2 samples for both channels DC and AC simultaneously. In interrupter mode, the built-in relay swiches fully GPS synchronized for interrupting not only rectifiers, but coupons for IR-free potentials. Finally with survey mode, the MiniLog2 is able to make DCVG and CIPS surveys while storing the GPS position for every measuring point taken.

Datalogger with Microvolt Measurement

Two channel sampling, each with DC and AC measurement, resulting in 4 values simultaneous measured per sample.
Both DC channels got microvolt resolution and have active filters built-in to prevent low AC frequency interference. The MiniLog2 is able to sample up to 1 300 000 values.
This results in up to 20 min. sampling even when measuring in "High-Speed mode" (= 1,000 measurements / second). The built-in USB connector allows galvanically isolated data transfer via a USB.

Miniaturised GPS Interrupter with Rechargeable Battery

The MiniLog2 has a mechanical 15A/60V relay built-in for switching of rectifiers, flanges and coupons. Optionally a version with built-in electronic relay 30A/60V is available.
Via the keyboard and the LCD a switching cycle resolution of 0.1s is configurable by the user. In addition, night and weekend savings are selectable. The rechargeable Li-Ion battery allows GPS synchronised switching for 30 days without recharging. For fixed installations in rectifier housings an USB mains supply and fix mount can be used. To increase the switching power even more, miniaturised external slave relays for MiniLog2 are available with 50 A and 100 A.

Coupon Measurement with MiniCoup

For measuring IR-free potentials on a coupon, MiniLog2 can sample and interrupt simultaneously.
For accurate sampling of the complete off depolarisation curve, MiniLog2 is able to measure 1000 samples/s for one channel for up to 20 min. time.
Optionally with the "MiniCoup" adapter and its built-in 10 Ohm shunt, the MiniLog2 samples every second for up to 24h. By just connecting pipe, electrode and coupon with the adapter sockets, On and Off potential and DC and AC current are collected simultaneously.

GPS Synchronisation and GPS Position

The optional Garmin GPS receiver allows synchronisation of the MiniLog2 time and date. Using the MiniLog2 as data logger in DCVG survey mode, the GPS positions are automatically stored beside each value.

DCVG and CIPS survey with Google® Maps presentation

Like with an analogue multimeter, MiniLog2 shows the DCVG voltage difference in a bar graph for quick recognition. With a simple press of the „OK"-button mounted on the electrode, the DCVG value and the related GPS position are stored and the survey continues. In the same way potential (CIPS) and/ or voltage gradient measurements can be done.
The survey path and the defects can be directly presented with Google Maps and the WinLog 2.0 software.

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Technical data

Measuring channels:	2 (DC+AC parallel = 4 values)
Measuring range and resolution:	± 100 mV / 1 µV (only DC)
	± 10 V / 0.1 mV (DC+AC)
	± 100 V / 1 mV (DC+AC)
Input impedance:	10 MΩ (for microvolt 250 KΩ)
Maximum sampling rate:	1,000 samples / second
	10 samples / second (with filter)
Lowpass filters:	16.6 Hz > 60 dB (factor 1,000)
	50.0 Hz > 100 dB (factor 10,000)
Recording capacity:	1,300,000 sampling values
	and 10,000 DCVG/CIPS measurements
Switching cycle:	In 0.1s steps, user configurable
Synchronization:	GPS and manual or external (Master / Sleeve)
Switching power:	Mechanic relay 60 V / 15 A
	Electronic relay 60 V / 30 A
Power supply:	Lithium-ion battery 3.6 V / 1,900 mAh
	charged with USB power supply
Time accuracy:	< 10 ms / 24h with GPS synchronisation
Battery time:	Datalogger mode: 10 days with 0.5s sampling rate
	20 weeks with 60s sampling rate
	Interrupter mode: 30 days with 4/2 and GPS
	DCVG / CIPS: 20 hours with GPS position
Dimension:	148 x 68 x 42 mm
Weight:	350 g

LS100 - Electronic Powerswitch 100 Ampere

Powerswitch with electronic relay. Build for usage in combination with a switcher. (For example with *MiniLog2*)
The LS100 is intended for switching of CP rectifiers, flanges, soutirages and drainages.
Easy to install with no need for checking the switching polarity, as the LS100 switches polarity independent.

Technical data LS100

Housing:	Metal with built-in heat distribution plates
Switching Power:	100 A (100 V DC / 70 V AC)
Operating Temperature:	-20°C up to 60°C
Dimensions:	W 125 x H 75 x D 160 mm
	(incl. 30 mm pole clamps)
Weight:	1.25 kg
Item No.:	140211

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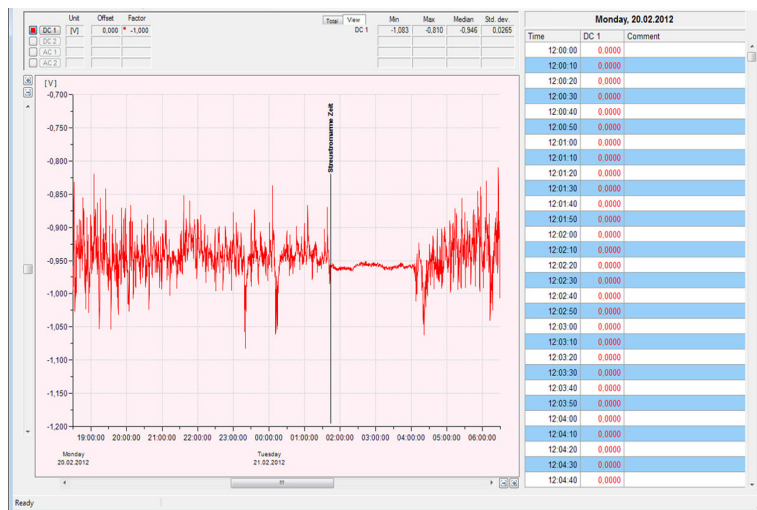
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WinLog 2.0 Data Logger Software

The software WinLog 2.0 for the evaluation of data loggings is especially designed for the new MiniLog2.
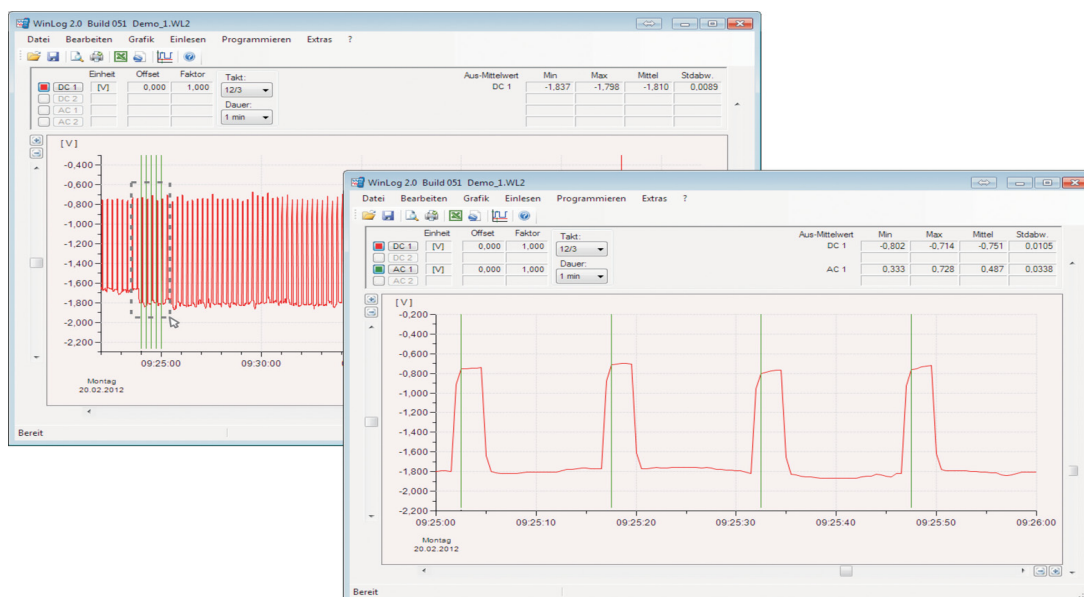
Beside the easy transfer of the samplings via USB to the PC, the WinLog 2.0 software supports 4 channel data evaluation with statistic (max, min and median building) and comprehensive printing features.

For the DCVG and CIPS evaluation WinLog 2.0 with an internet connection allows the instant presentation of the survey path together with the location of the defects.
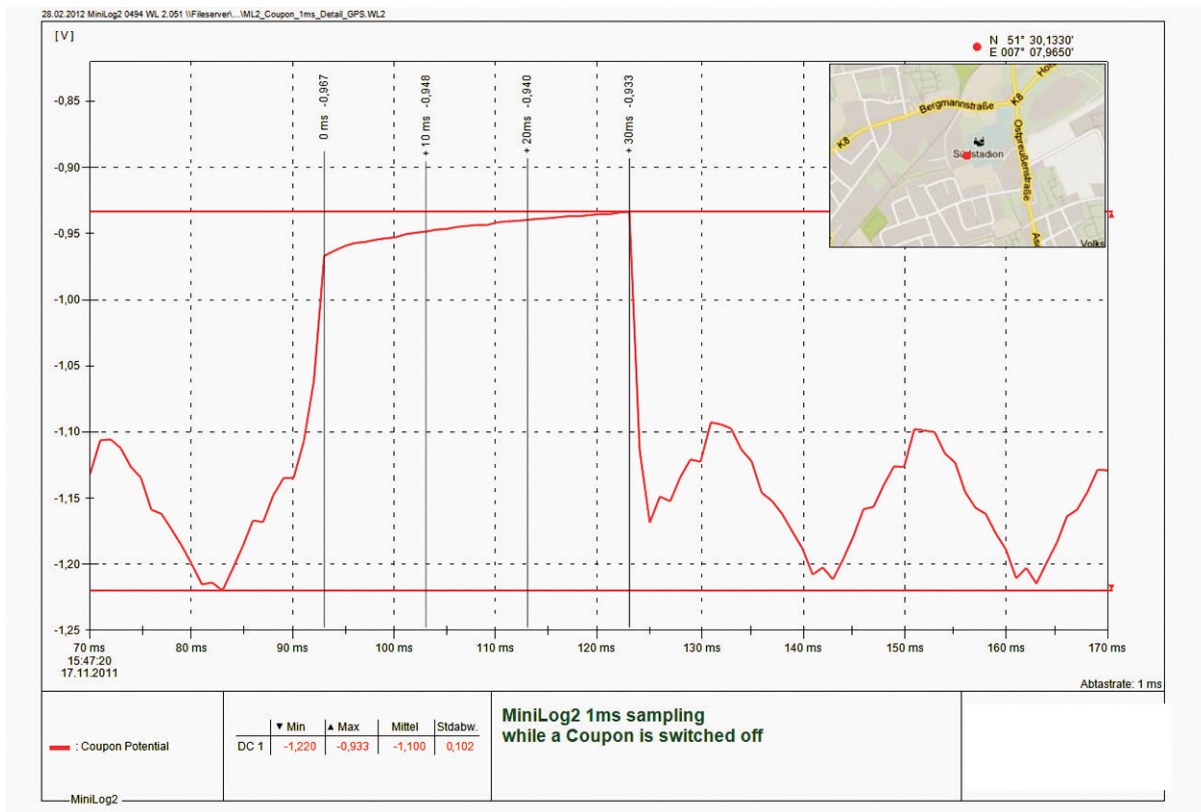.
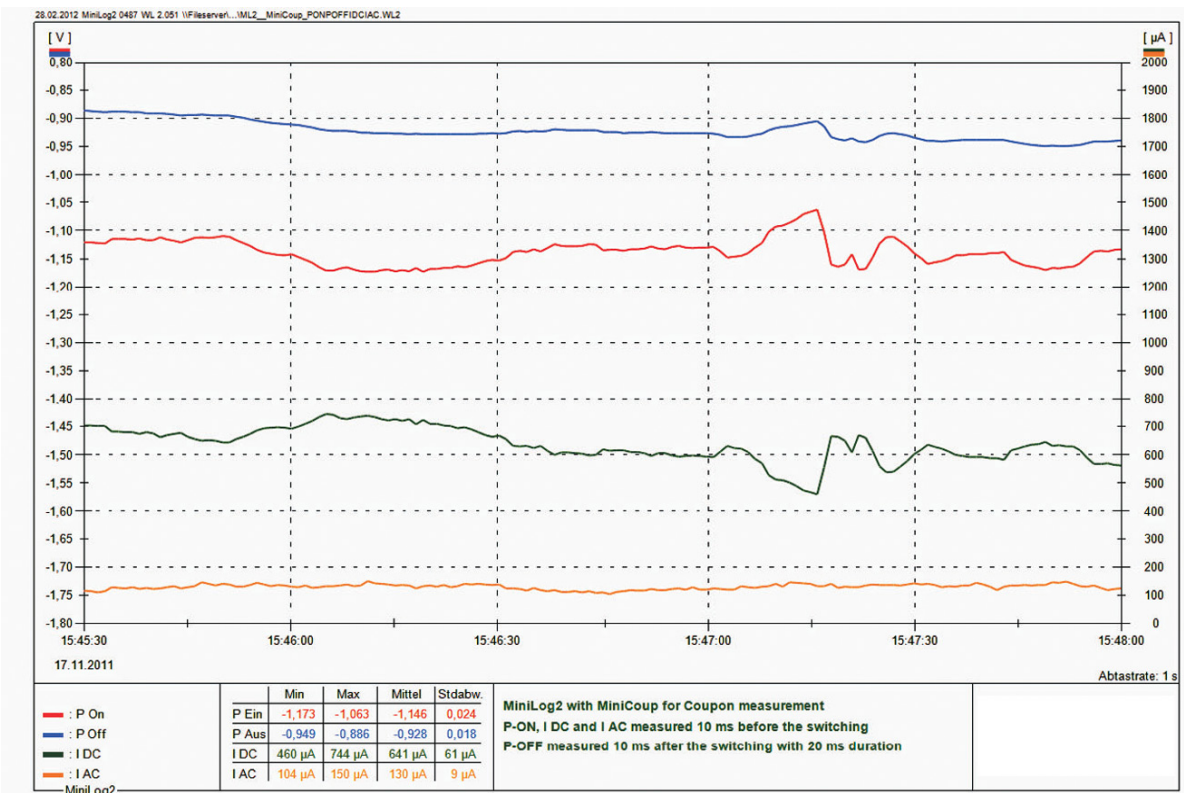WinLog 2.0 works with Windows® XP, Vista and Windows®7 (32/64 Bit)

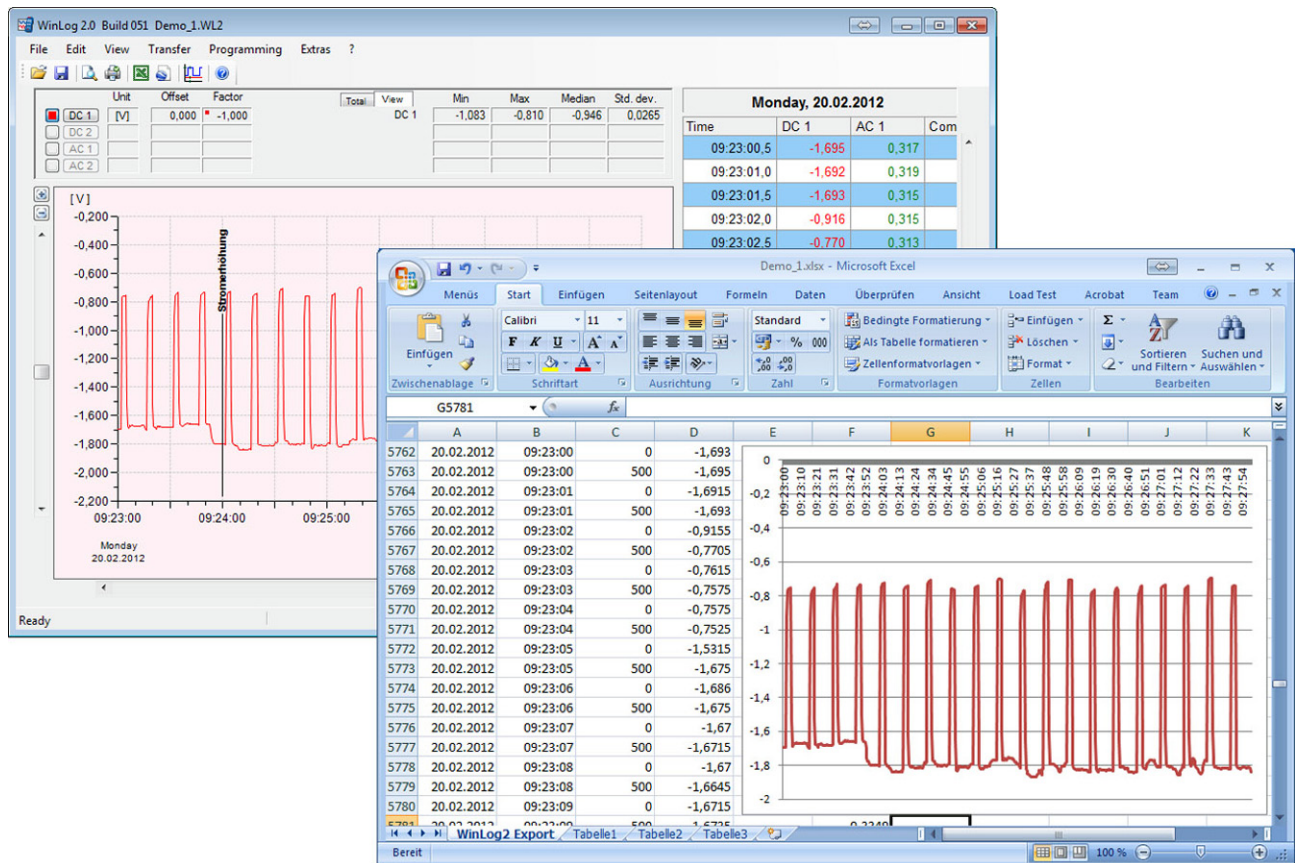Stray current sampling during 24 hours

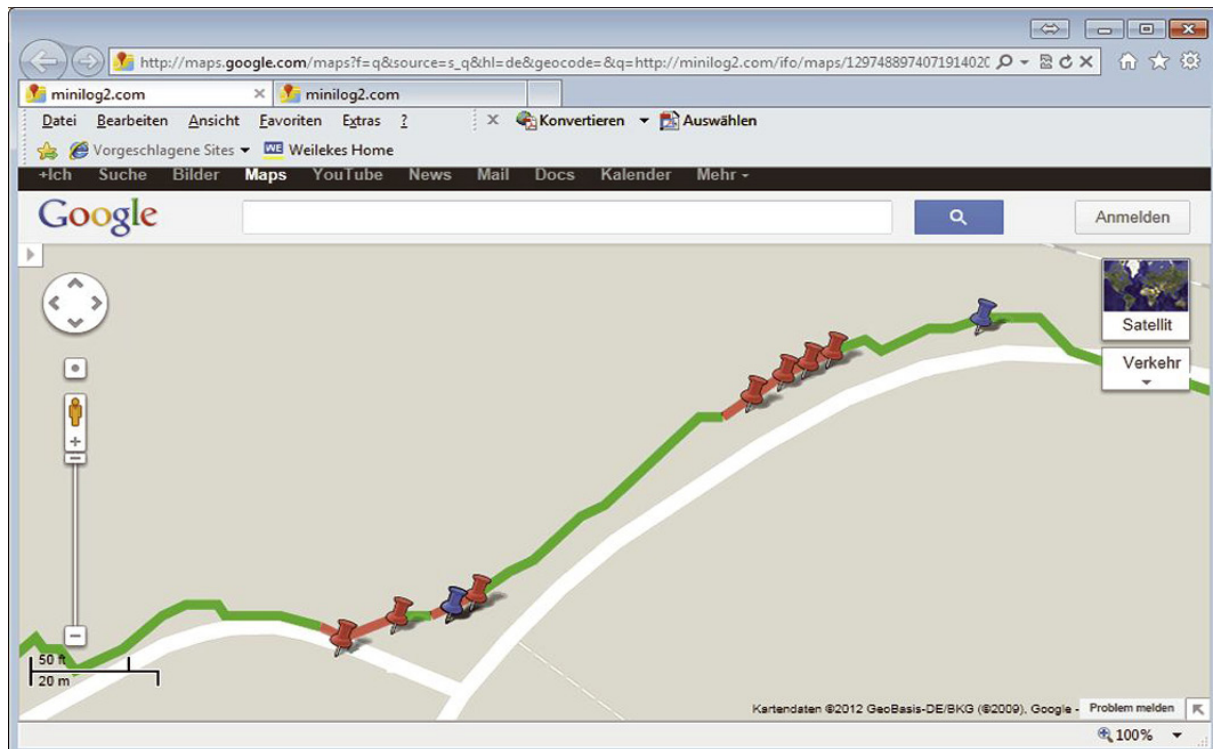Median values of the Off-Potential with a screen mouse zoom

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Print: Coupon switching with 1 ms sampling rate

Print: 24 hours coupon measurement with P_{ON} + P_{OFF} + I_{DC} + I_{AC}

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Built-in export feature for Microsoft® Excel®

DCVG measurement export to Google® Maps for defect localization