

Datalogger  
GPS Time Switch  
DCVG and CIPS



## **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 with 15A relay · Li-Ion battery for 1 month continuous switching · DCVG + CIPS with GPS · Waterproof IP68

# MiniLog2



## General

The new MiniLog2 is a water-proofed universal measuring instrument with LCD and keyboard designed for CP measurement tasks. Used as a datalogger the MiniLog2 samples both channels for DC and AC voltages simultaneously. The integrated 15A relay is fully GPS synchronized and switches not only coupons, but also rectifiers and flanges.

In addition, the MiniLog2 is able to make DCVG and CIPS measurements and stores the GPS coordinates for every measuring point.

## Datalogger with Microvolt Measurement

Two channel sampling, each with DC and AC measurement, results in a maximum of 4 values per measurement. Both DC channels allow microvolt resolution and have active filters built-in to prevent low frequency interference.

The MiniLog2 is able to sample up to 1,300,000 values (4 MByte, optional 16 MByte). This results in up to 20 min. sampling even when measuring in "High-Speed mode" (= 1000 measurements / seconds). The built-in USB connector allows galvanically isolated data transfer via a USB to the PC/Notebook.



## Miniaturized Time Switch with Rechargeable Battery

The MiniLog2 has a mechanical 15A / 60V relay for switching of rectifiers, flanges and coupons. Optionally available is a solid state 18A / 100V switch.

Via the keyboard and LCD a switching cycle resolution of 0.1s is configurable by the user. In addition, night and weekend suspension is selectable.

The rechargeable battery allows switching for one month. For a fixed installation in the rectifier housing the included USB mains supply can be used.



## DCVG and CIPS

MiniLog2 shows the DCVG voltage difference in a specially designed LCD bar graph for quick recognition.

With a simple press of the "OK" button the DCVG value and the related GPS coordinates are stored and the

measurement continues. In the same way potential and voltage gradient measurements (CIPS) are done.

## Coupon Measurement with 1KHz Sampling Rate

When measuring coupon IR free potentials the MiniLog2 is able to simultaneously switch and measure the coupon potential. To avoid measurements during times when a switching spike or equalising current could affect the reading it is possible to set the delay between switching and taking the measurement. This delay can be adjusted in increments of 1 ms. For accurate sampling during the complete off period the MiniLog2 is able to measure up to 1,000 measurements / seconds.



## GPS Synchronisation and Coordinates

The optional Garmin GPS receiver allows the exact synchronization of the MiniLog2.

Using the MiniLog2 as datalogger or for DCVG measurement, the GPS coordinates are automatically stored beside each measurement.

## Software WinLog 2.0

The office software "WinLog 2.0" for the evaluation of the datalogging is specially designed for the new MiniLog2.

"WinLog 2.0" is also compatible for the old MiniLog (128 / 512) and will run under Windows XP, Vista and 7.0.



## Technical Data

<b>Measuring channels:</b>	2 (DC+AC parallel = 4 values)
<b>Measuring range and resolution:</b>	± 100 mV / 1 µV (only DC) ± 10 V / 0.1 mV (DC+AC) ± 100 V / 1 mV (DC+AC)
<b>Input impedance:</b>	10 MΩ (for microvolt 100 KΩ)
<b>Maximum rate:</b>	1,000 measurements / seconds 10 measurements / seconds (with filter)
<b>Lowpass filters:</b>	16.6 Hz > 60 dB (factor 1,000) 50.0 Hz > 100 dB (factor 10,000)
<b>Recording capacity:</b>	1,300,000 values Version: 4 MByte (=20 min with 1,000 measurements / seconds)
<b>Switching cycle:</b>	In 0.1s steps, user configurable
<b>Synchronization:</b>	Manually, externally or via GPS
<b>Switching power:</b>	Mechanic relay 60V / 15A Solid state switch 100V / 18A
<b>Power supply:</b>	Lithium-ion battery 3.6V / 1,900 mAh charged with USB power supply
<b>Time accuracy:</b>	< 10 ms / 24h (with GPS) w/o GPS ( -10°C - 30°C) < 50 ms / 24h w/o GPS ( -20°C - 60°C) < 200 ms / 24h
<b>Battery time</b>	
Datalogger mode:	2 weeks with 0.5s sampling rate 52 weeks with 60s sampling rate
Switcher mode:	4 weeks with 12/3 and GPS
<b>Dimension:</b>	148 x 68 x 42 mm
<b>Weight:</b>	350g
<b>Item-No:</b>	130 111 (mechanical relay) 130 171 (solid state switch)