

# CW-401 MK II CURRENT CLAMP WITH CAN-INTERFACE



CW-401 MkII is a high-precision current clamp meter for contactless current measurement in the measuring ranges from ±10 A to ±1000 A. The high-quality and robust case - with very small dimensions - makes it ideal suited for measurements in rugged environments and hard-to-reach places, e.g. in the engine compartment.

Even at high ambient temperatures, up to +120 °C, the CW-401 has an outstanding accuracy due to an intelligent temperature compensation. This is achieved by digital signal processing of its integrated logic. Current measurements are transmitted comfortably via CAN-bus. Though this bus system, measurements can be sent over long distances without any signal degradation due to EMI or noise.

In combination with the CW-101 CAN-USB-interface device, the current clamp can be simply configured by the intuitive configuration software. Parameters as output rate, CAN-ID, bitrate and Bus data rate are configured easily. Moreover, several clamps can be configured simultaneously and a common DBC-File can be exported - e.g. for using in measuring chain.

## **FEATURES**

- Measuring ranges ±10 A to ±1000 A
- High accuracy 1 %
- Extended temperature range
- Temperature compensation, sensor position- and remanence correction
- Output of the measuring values via CAN-bus
- Robust case
- Small form factor, for application to hard-to-reach measuring points
- Factory calibration
- Intuitive configuration software



## **CURRENT MEASUREMENT**

Measuring ranges	±10 A, ±30 A, ±50 A, ±150 A, ±350 A, ±500 A, ±750 A and ±1000 A
Resolution	1 mA
Accuracy	1 % relative to measuring range (up to $\pm$ 50 A additionally $\pm$ 50 mA)
Output rate	max. 2 kHz, configurable
Measurement category	CAT I (measuring voltage up to 48 V) CAT III (in preparation)
DSP-filter	Cut-off frequency depending on output rate

## **CAN-INTERFACE**

Quantity	1
Туре	ISO 11898-2 (high-speed) CAN protocol versions 2.0 A and 2.0 B
Bitrate	High-speed up to 1 Mbit/s
Connectors	4 pin LEMO, connection cable available on request

### **POWER SUPPLY**

Supply voltage	9 to 36 VDC
Current consumption	approx. 40 mA at 12 VDC

## **ENVIRONMENTAL CONDITIONS**

Temperature range	up to 150 A: -40 °C to +120 °C from 350 A: -40 °C to +110 °C
Protection class	IP 65

#### **GENERAL INFORMATION**

Housing	up to ±150 A: Robust aluminium case from ±350 A: Robust polyamid case
Dimension (LxWxH)	up to ±50 A: 59 mm x 32 mm x 17,5 mm ±150 A: 68 mm x 36 mm x 17,5 mm from ±350 A: 90 mm x 55 mm x 22 mm
Diameter Ø	up to ±50 A: 6 mm ±150 A: 11 mm from ±350 A: 18 mm
Weight	up to ±50 A: approx. 60 g; ±150 A: approx.: 80 g; from ±350 A: approx. 110 g
Factory calibration	Standard: -20 °C to +110 °C Extended: -40 °C to +120 °C DakkS calibration on request
	Offset calibration over CAN-bus

Features

#### Offset calibration over CAN-bus Automatic remanence correction Integrated temperature measurement Intuitive software configuration CANWAY Plugin for IPEmotion



