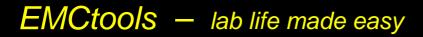


Current Sensor fiber optic current sensor





ナカノEMC株式会社 〒557-0052 大阪市西成区潮路1-3-22 TEL 06-6656-4747FAX 06-6656 web:nakanoemc.com



EMCtools

Current Sensor

Introduction and use:

The EMCtools Current Sensor-Set offers new possibilities in automotive EMC susceptibility tests.

It provides a galvanic insulated DC current measurement for DUT supervision or failure detection. High rated measurement current and extreme low voltage drop come together with high resolution and good accuracy. The measurement head has been tested for field strength of >270V/m.

The built in battery allows measurement in pos. or neg. battery line. It can be recharged by connecting it to a USB connector of any available PC or notebook.

The current data is transferred to the control unit using a standard simplex fiber optic F-SMA cable.

The control unit displays the current on a display. A trigger signal can be generated to trigger Oscilloscopes or to control the susceptibility test depending on various current situations.

A CAN-bus interface provides the measured current permanently or when triggered on HS-CAN or LS-CAN. CAN-bus, CAN-speed and CAN-identifier can be set individually.

The measured current data is also available via USB.

A built in USB to CAN interface can be used to send EMC related data like test frequency or field strength etc. to CAN bus.

All settings and options can be made locally using a menu rotary switch or via remote commands (USB). Settings are stored in non volatile memory.



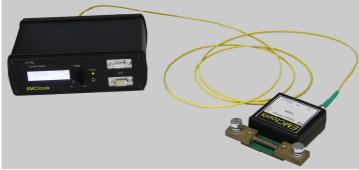


Photo: typical setup

Technical data:

Current Sensor head: Rated current: Voltage drop: Resolution: Accuracy: Power supply Battery life: Connector electrical:

Connector optical: Max. cable length: Sampling rate: Ambient temperature: Size: Weight:

Control unit:

Power supply: Connector electrical: Connector optical: Trigger output: Trigger impulse: Trigger on: CAN Bus: CAN bus baudrate:

CAN connector: CAN bus interface: Bus-Impedance: Setting: Ambient temperature: Size: Weight: 100A (116A in overrange) 60mV for rated current 1mA (100µA in moving mean mode) better 0,5% +/- 3 digit rechargeable Li-Ion battery (internal) >24h USB (f) connector – only for charging M8 screws for current measurement Standard F-SMA for multimode fiber (50/125µm or 62.5/125µm) >200m 6 samples per second storage/operation: -10 – 50°C (14 - 122 °F) 98 x 100 x 28 mm (I x w x h) approx. 220g

DC power jack, 7 - 15V DC, max. 0.5A, or via USB USB (f) connector - data connection to PC or Notebook Standard F-SMA TTL signal, active high, BNC (f) connector 10ms - 99.99s current value (< >), current window (within, outside) High Speed CAN acc. ISO 11898-2 - Low Speed CAN acc. ISO 11898-3 (ISO 11519-2). HS-CAN: 33.3k, 50k, 62.5k, 75k, 83.3k, 100k, 125k, 200k, 250k, 500k, 800k, 1M LS-CAN: 33.3k, 50k, 62.5k, 75k, 83.3k, 100k, 125k 1 pcs 9-pin Sub-D (f), 1 pcs 9-pin Sub-D (m) - all signals passed through CAN interface USB-> CAN for sending test related data to CAN bus no load – high impedance options are set with menu rotary switch dialog or via USB and terminal program storage/operation: -10 - 50°C (14 - 122 °F) $154 \times 172 \times 59 \text{ mm} (1 \times 10^{\circ} \text{ mm})$ approx. 630g

Delivered devices of the system and accessories:

- 1 pcs EMCtools Current Sensor (100A)
- 1 pcs control unit
- 1 pcs manual
- 1 pcs plug in power supply

- 1 pcs USB-cable

- 1 pcs Data-CD with drivers and manual