

## Data Logger with 4..20 mA current loop interface

M27766: Data Logger with 2x 4..20 mA interface  
C27766: Data Logger with Wi-Fi and 2x 4..20 mA



This Data Logger records analogue values from two 4..20 mA current loop interfaces. The values are sampled at an adjustable rate and stored into a file on the memory card together with a time stamp. The data are stored in a text format – which is easy to import into Excel or other analysis programs. Long term data acquisitions are possible due to SD card support of up to 16 GBytes. The interfaces are galvanically isolated to separate power supply and interfaces.

### General features

- Two 4..20 mA current loop interfaces
- SD memory cards of up to 16 GByte
- Text output format for easy analysis
- Galvanical isolated interfaces
- User definable behaviour (“Scripting”)
- Real time clock (battery backed)
- Wi-Fi option to wirelessly access data
- GSM/GPRS option to upload data off-site

### Output file format

By default, the mA values of the two channels are stored into one text file with a leading time stamp.

```
2013/11/04 03:28:26 10.320 mA 11.756 mA
2013/11/04 03:28:27 9.066 mA 12.748 mA
2013/11/04 03:28:28 9.064 mA 12.980 mA
```

This format can be changed to output physical values (temperature, pressure, ... rather than mA). Almost any other custom definable output format can be realized.

### Scripting

The logger is using small programs to control the functionality. Various ‘scripts’ are available ready to use, but also can be easily adapted to individual needs. Syntax of those Scripts is similar to the Basic programming language. See documentation for details. Data Logger is shipped ready to use.

### Mechanical data:

Dimensions: 98 x 64 x 34 mm, Weight: 180 g  
Max. Temperature: -20°C - 65°C (SD card or SIM card might be limited to lower ranges)  
Protection class of the box: IP66 (dust/weather)  
Card slot is underneath the cover fixed by screws. To extract the SD memory card, lid needs to be unscrewed.

### Interface: 4..20 mA and 0..20 mA

Sample Rate: adjustable (10 ms or higher)  
Sampling resolution: 16 bit  
Interface galvanically isolated.  
Mode: 4...20 mA or 0..20 mA  
Current sensing resistor: 49 Ohm

### Real Time Clock

Real time clock with time and date. Buffered for 1 month. Buffer battery recharges within 48 hours.

### Connector: Screw terminal

A weather and dust resistant cable feed leads to screw type terminals.



No.	4..20mA interface
1	Isolated: Signal Ground
2	Isolated: 5V output, max 80mA
3	Isolated: Channel 2 (-)
4	Isolated: Channel 2 (+)
5	Isolated: Channel 1 (-)
6	Isolated: Channel 1 (+)
7	6-32V Supply
8	GND Supply Ground

n.c. : do not connect

### Power supply

Supply voltage: 6V-32V, power: 0.9 to 3.6 W, reverse protection, Power Save option, Buffer length for real-time clock: appr. 1 month (charging time: appr. 48h)

### Options: GSM/GPRS and Din Rail Fitting

The logger is also available with a GSM/GPRS interface for mobile data service.



The logger is also available with a Din Rail Fitting.

For further information and updates see also the Avisaro webpage: [www.avisaro.com](http://www.avisaro.com) (English) or [www.avisaro.de](http://www.avisaro.de) (German). The product is for professional use only. Read product manual carefully.

Avisaro AG  
info@avisaro.com

Grosser Kolonnenweg 18 /D1  
30163 Hannover, Germany