



## Description

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The CDL Data-Logger is a mobile system that records measured values from reticulation networks independent of main power supply. The evaluation is done with a PC and the CDLWin software, which is available from Sensus.

## Application

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Reticulation network management  
Recording of consumption patterns  
Recording of reservoir levels  
Recording of flow rate and pressure  
Recording of temperature deviation

## Special Features

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Recording of analogue values (pressure) and flow simultaneously  
Up to 4 sensors may be connected simultaneously (CDL - 4U)  
Inputs may be used for either digital or analogue sensing devices  
3 independent memories (day, hour and events)  
Positive and negative data logging  
LC-Display for current values; switchable by reed switch  
Alarm contact  
Compact design  
Battery powered (Independent of the mains power supply)  
Separate battery enclosure for standard cells (LR 6)

## LC-Display

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Programming data  
Momentary values  
Extreme values  
Battery voltage

## Available Options

CDL Data-Logger in aluminium cast casing with alphanumeric LC-display

Robust and watertight (IP 68)

CDL - 1U 1 input

CDL - 2U 2 inputs

CDL - 4U 4 inputs

## Accessories

Evaluation software CDLWin, for CDL Data-Logger

CDL/PC-connection cable

Appropriate

CDL-pressure sensors,

CDL-current interfaces,

CDL-temperature interfaces etc.

are available.

## Technical Data

Type	CDL - 1U; CDL - 2U ; CDL - 4U
Inputs:	1, 2 or 4 (interchangeable analogue/pulse)
Memory:	separated memory blocks for day, hour and events CDL - 4U : 512 kB CDL - 2U : 256 kB CDL - 1U : 128 kB
LC-display:	2 x 16 characters, alphanumeric
Protection:	IP 68
Casing:	cast aluminium
Dimensions:	220 x 105 x 70 mm
Weight:	app. 1200 g
Operating temp.:	0 ... 50 °C
Storage temp.:	-10 ... +70 °C
Battery:	6 x Mignon LR 6 (9V) alkaline cells
Battery life time:	1/2 ... 2 years (depending on application)
Battery warning:	at 6.3 V
System clock:	real time (deviation < 10 <sup>-4</sup> at 10 °C ≤ T ≤ 30 °C)
Output:	V.24 / RS 232 - compatible data interface to connect to the PC All socket connectors are waterproof IP 68
Alarm contact:	FET open drain, I max 100 mA; U max 50 V

### Pulse input

Input frequencies: (programmable)	High resolution $f \leq 10$ Hz (with internal pre-scaler $f \leq 50$ Hz)
Pulser:	<ol style="list-style-type: none"><li>1. mechanical contact: e.g. REED switch Resistance, closed: <math>R \leq 10</math> kOhm (<math>I &lt; 5</math> mA) Resistance, open: <math>R \geq 4.7</math> MOhm</li><li>2. Open collector pulser Resistance, closed: <math>U \leq 0.2</math> V (<math>I &lt; 5</math> mA)</li><li>3. Pulser with external power source <math>4V \leq U_h \leq 12V</math> / <math>0V \leq U_L \leq 0.2V</math></li></ol> Cable length: max. 50 m

### Analogue Input

A/D converter:	12 bit, 0 ... 4096 digit
Measuring interval:	0.1 sec. ... 1 day
Unit:	programmable (bar, °C etc..)
Threshold value:	0 ... 4096 digit