



Description

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

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

Special Features

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

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 ⁻⁴ 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:	1. mechanical contact: e.g. REED switch Resistance, closed: $R \leq 10$ kOhm ($I < 5$ mA) Resistance, open: $R \geq 4.7$ MOhm 2. Open collector pulser Resistance, closed: $U \leq 0.2$ V ($I < 5$ mA) 3. Pulser with external power source $4V \leq U_h \leq 12V$ / $0V \leq U_L \leq 0.2V$ 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