

SL 2

Synchronous logger



A genuine alternative to dynamic recording of large volumes of data. In conjunction with the MCC measurement system, the SL 2 synchronous logger is able to record measurement data at a specific point in time simultaneously across all connected systems. Measuring circuit are recorded synchronous in real time work.

Sensor technology

The synchronous logger records and stores measurements taken by GLÖTZL pressure and voltage sensors or measurement systems with a measurement output of 250 mV at a constant current of 1 mA.

Two sensors can be connected to each synchronous logger (full bridge in electrical terms). The network-compatible loggers can be linked using bus lines. Each logger has its own network number for this purpose. Communication with the individual loggers is possible via a central measurement station (MCC measurement system or PC program).

Technical data

Sensor input:	Full bridge, constant 1 mA supply, internal gain factor of 10
Sensor measuring range:	0 – 250 mV (0-25,000 digit internal calibration)
Baud rate:	9,600 or 38,400 bauds as required
Digitisation:	16-bit AD converter
Measuring frequency:	Max. 10 Hz at 9,600 bauds Max. 20 Hz at 38,400 bauds
Memory:	128 kB -> at least 40 mins of recording at 10 Hz Dynamic memory compression process
Bus:	RS 485 bus system with galvanically isolated interfaces
Display:	Orange LED = Bus supply +24 V Green LED = Internal logic supply +5 V Red LED = Flashing -> dynamic measurement active = On -> memory is full

Operation

1. Static measurement:

The measurement system sends a command to each logger in turn. The logger then sends back the value measured by the connected sensor. This value is stored not in the logger but in the measurement system once it has been transferred.

2. Synchronous measurement:

The measurement system sends a command to all loggers. Each logger then simultaneously measures the connected sensor and stores the value measured. The central measurement system sends the synchronous measurement command every 100 ms (= 10 Hz measuring frequency). After synchronous measurement, the central measurement system reads and saves the data in the loggers' memories in turn. The data is subsequently deleted from the relevant memories.