

GLÖTZL Baumeßtechnik

MICRO MEAS. STATION

for 20 / 40 sensors

Type: MDL 41 / 20

Type: MDL 41 / 40

Art. No: 54.01/02



← GSM – Radio antenna

← Solar cell

Basic equipment:

- Glass fibre reinforced wall housing
350 x 250 x 170 (L x W x D)
- Terminal clamps for the sensors:
(MDL 41 / 20) 20 pcs. 2- and 4-conductor
(MDL 41 / 40) 40 pcs. 2- and 4-conductor
- Integrated accu for measuring periods of
1 week up to several years

Extensions / options:

- Double-walled thermohousing
- Solar cell with solar regulator
- GSM-modem
- Mains charger and accu for mains buffering
- Networking of several systems

Internal view with basis – connection
board and central unit : MDL 41 / 20
MDL 41 / 40



- variable operation mode
- self-sufficient as datalogger
- as micro meas. station in meas. network
- data transfer by dedicated line modem, radio or GSM, LWL
- universally programmable
- easy assembling and handling
- completely exchangeable

Application

For construction control of barrages, tunnels and bridges

Connections:

- 1 RS 232 serial interface
- 2 Special functions (e.g. alarm, modem a.s.o.)



Description

The micro measuring station MDL 41/20 can supply and automatically measure up to 20 sensors (MDL 41/40 up to 40 sensors). All inputs are galvanically separated from each other. The micro measuring station is universally programmable for the use of most electric sensor types. As program for parameterizing, reading in and administration of measuring values, the program GLA7 for Windows (98, NT4, 2000) is used. Adjustable at the station are for example:

- Different measuring times for sensors which can be subdivided in groups
- Type of supply for each sensor
- Quantity of measurements for each cycle

- Quantity of measurements for formation of mean value
- Detection of limit values and indication
- Message of state and malfunction

The measuring results are stored fail-safe; for increase of safety, each measured value is filed with date and time.

In self-sufficient operation, the energy supply can be ensured over several years by means of a Li-battery. Normally, lead or NiMH-accus are used which are charged by network or solar cells.

The stored measured values can be downloaded at any time. This can be done by laptop or reading device resp. by a single wire from a central unit. Modems can also be connected and then enable an access from any point you like.

A remote adjustment of the measuring program can be carried out by an authorized user from any point or location.

The complete micro measuring station is constructed in a pluggable way and can subsequently be attached to already installed GDS7-compatible connection units which thus can be measured automatically.

For measurements for a limited time or for extreme applications, complete measuring networks can be exchanged by attachment.

An option with display and keyboard is offered with the designation micro measuring station MDL 46. With this unit, measured values can be regarded and adjustments can be changed in-situ without assistance of a laptop.

Technical data type MDL41

Quantity of meas. points:	MDL 41/20: 20 pcs. (four-wire circuit) MDL 41/40: 40 pcs. (four-wire circuit)	
Connectable sensors:	4-20mA	e.g.: Displacem. transducers, pressure sensors, leak. water meas. units
	1mA	e.g.: Pt100 – Temperature transducer
	2.5V/ 0.1/ 1mA-bridges	e.g.: Pressure transducers, temperature sensors
	Vibrating wire	e.g.: Pressure-, expansion-, inclination-, temperature transducers
Optional:	Serial sensors (RS485-bus)	e.g.: Active transducers, plumb meas. devices, leakage water level
Accuracy:	0.05% analog 0.005% vibrating wire	
Memory:	10,000 meas. values with date and time (opt. 20,000) 1,000 state- and malfunction messages	
Interfaces:	RS 485, galvanically separated, GMS7-bus compatible Wire-, radio-, GSM-modem LWL-converter	
Circuit outputs:	Alarm, power, communication: One potential-free contact each max. 42V, 1A 4 project-specific programmable outputs open-gate max. 28V, 0.5A	
Supply:	Internal Li-battery or external lead/NiMH-accu event. w. charging unit	
Support time:	Acc. to equipment 1 week several years	
Protection type:	IP55, opt. IP67	
Dimensions:	200x112x70mm (without switch-on plate)	

