

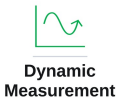
MOBILE STRAIN GAUGE AMPLIFIER



1052 DISPLAY

Type: **EHOA**

- 24 BIT RESOLUTION
- DATA RATE UP TO 3 000 HZ
- SD CARD DATA LOGGER
- IP51 · IP65 AS OPTION



KEY DATA

Input	strain gauge bridge 1.0 / 2.0 / 3.5 mV/V or 0 ... 10 V
Output	–5 ... +5 V · USB 2.0 · SD card
Accuracy	class 0.05 %, 24 bit
Housing	aluminium, IP51 (IP65 as option)



OVERVIEW

Measuring amplifier and data logger in one hand-held case: full, half and quarter bridges, potentiometric sensors and 0 ... 10 V signals go to the 15-pole D-sub socket, and the reading is stored on the SD card with a time stamp. Bridge completion for 120, 350 and 1 000 Ω is built in, and six sensor configurations can be recalled – one device serves several test set-ups. Battery operation makes it independent of the mains.

MEASUREMENT

- full, half and quarter bridge · 0 ... 10 V
- 24 bit · accuracy class 0.05 %
- data rate 0.3125 ... 3 000 Hz

LOGGING AND OPERATION

- SD card record, up to 1 000 Hz
- 6 sensor configurations recallable
- USB 2.0 · real time clock · battery



TECHNICAL DATA

INPUT AND MEASUREMENT

Analog inputs	1
Sensitivity steps	1.0 · 2.0 · 3.5 mV/V
Input resistance, full bridge	87 ... 5 000 Ω
Half and quarter bridge	120 · 350 · 1 000 Ω
Voltage input	0 ... 10 V
Input resistance, voltage	56 k Ω
Bridge supply	2.5 · 5 V

PRECISION

Accuracy class	0.05 %
Linearity error	0.02 % F.S.
Temp. effect on zero	0.2 % F.S. / 10 °C
Temp. effect on sensitivity	0.01 % RD / 10 °C
Resolution	24 bit
Data rate	0.3125 ... 3 000 Hz
Limit frequency, analog	1 700 Hz

ENVIRONMENT AND MECHANICS

Rated temperature range	0 ... +50 °C
Operating temperature range	-20 ... +70 °C
Protection	IP51 · IP65 as option
Housing	aluminium, portable hand-held device
Dimensions	164 × 105 × 32 mm
Connection	15-pole D-sub socket

SCOPE OF SUPPLY

SD memory card	class 10 – recommended for records at 1 000 Hz
Power supply unit	switching supply 100 ... 240 V / 18 V, 1.67 A
Mating connector	15-pole D-sub plug
Cable and software	USB cable · software CD · manual

OUTPUTS AND INTERFACES

Analog output	1 × -5 ... +5 V
Output resistance	47 Ω
Interface	USB 2.0 full speed
Recording	SD card, up to 1 000 Hz, time stamped

DISPLAY AND OPERATION

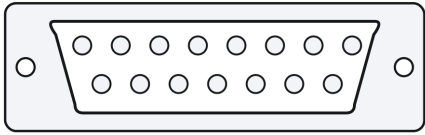
Zero adjustment	digital · software · regulation
Zero tolerance	0.01 %
Time period	1 ms
Debouncing time	4 ms
Trigger level	3.4 ... 29 V
Trigger edge	level
Sensor configurations	6, recallable
Clock	real time clock

POWER SUPPLY

Supply voltage	10 ... 29 V
Mobile use	battery operation



ELECTRICAL CONNECTION



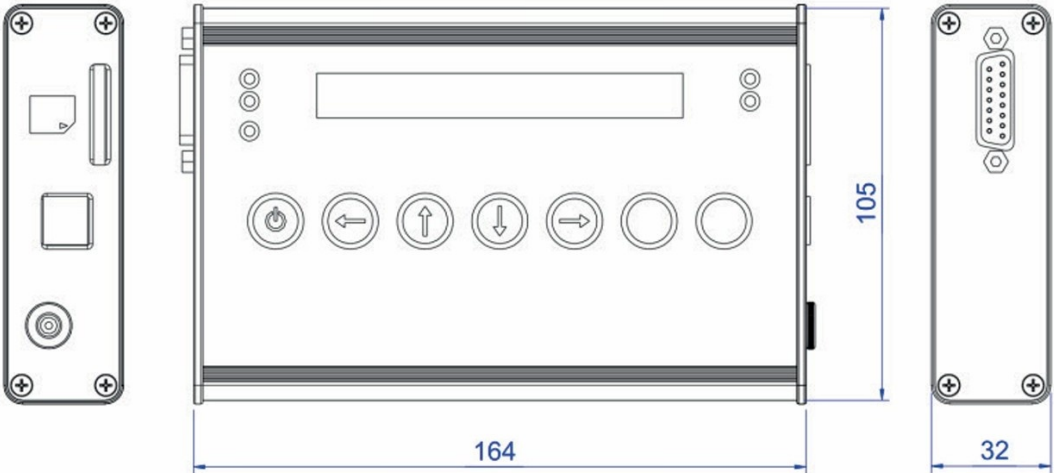
Numbering as in the manufacturer manual

1	Shield	
2	GNDA	ground analog input / output
7	Tara	zero set input / trigger input
9	UE	analog input
10	UA	analog output
6	+ Us	positive bridge supply
5	- Us	negative bridge supply (GND)
8	+ UD	positive differential input
15	- UD	negative differential input
13	+ UF	positive sense line
12	- UF	negative sense line
14	HB	half bridge selection
11	QB 120 Ω	completion resistor 120 Ω
3	QB 350 Ω	completion resistor 350 Ω
4	QB 1000 Ω	completion resistor 1000 Ω

Half and quarter bridges: bridge pin 14 to pin 15
Quarter bridges are connected to pin 2, pin 8 and QB (3, 11 or 4) in three-wire technology

15-pole D-sub socket.

DIMENSIONS (mm)



All dimensions in mm.

COMPLIANCE AND CERTIFICATION



IP51 · IP65

IP51 standard version, IP65 as option



ACCESSORIES AND OPTIONS

IP65 version

as option

Device type: EOD.

