



**EMS Brno**

**Data Acquisition Environment**  
Hardware – Software – Cloud application  
[www.emsbrno.cz](http://www.emsbrno.cz)

## **Datalogger MicroLog V3A (and V3/4.096V)**

### **Main features:**

- Small three-channel general purpose water sealed datalogger
- Three voltage inputs with voltage excitation in different levels
- Water sealed case
- Infrared data access without opening the enclosure
- Manufactured by EMS



### **Specifications:**

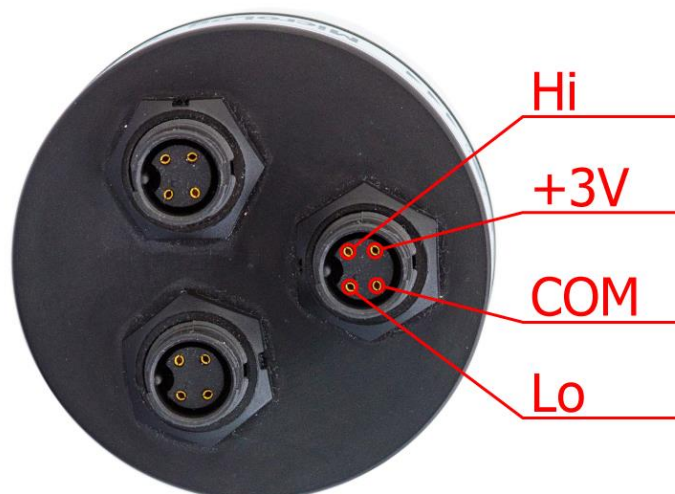
- Three voltage inputs in eight ranges up to 2400 mV
- Excitation voltage 3 V or 4.096 V (voltage reference quality), 15 mA (max.)
- 16-bit resolution
- Memory capacity 100,000 readings (4 years when measuring each hour)
- Battery capacity more than 5 years (when measuring each hour)
- Fully watertight – IP 68 rating
- Working range -40 to 60 °C
- High density Polyethylene case
- Size D70 x 40 mm (without connectors)



## Specification

Memory capacity	256 kB (ca 100,000 values)
Channel types	Three differential voltages
Voltage inputs	$\pm 20$ mV up to $\pm 2400$ mV in eight ranges ( $\pm 7.5$ mV up to $\pm 1100$ mV for V3/4.096V)
Voltage limit	maximum +2.5 V on any input terminal
Accuracy	0.03 % of full scale
Resolution	16 bits
Measuring interval	3 sec to 4 hrs
Averaging interval	3 sec to 4 hrs
Warm-up time	common, up to 5 sec, activated for each channel
Exciting voltage	3 V $\pm$ 30 mV (4.096 V $\pm$ 2 mV for V3/4.096V)
Max. load	15 mA for each sensor
Operating environment temperature	-40 to 60 °C
Operating environment humidity	0 to 100 %
Size (diameter x length)	70 x 55 mm (incl. connectors)
Weight (incl. battery)	115 g
Battery	SAFT LS14250CNA (LS14500CNA for V3/4.096V)
Sensor connection	4-pin Switchcraft EN3 P4 connector female

## MicroLog V3A and V3/4.096V wiring



**Software:** Mini32 universal software is running under Windows® 7, 8 and 10. The software assures all necessary operations – system setup, data downloading and processing. Its data processing part is made for work with large and long-time data series. It offers exceptionally sophisticated visualization and data manipulation, it includes basic statistic features, creates and prints graphs and exports data to different file formats.