



EMS Brno

Data Acquisition Environment
Hardware – Software – Cloud application
www.emsbrno.cz

Minikin TH2 (/R)

Air temperature and humidity logging sensor

upgrade of a popular product
Minikin THi with replaceable
measuring chip

Main features:

- Built-in air temperature and humidity sensors
- Sensor chip replacement by customer on site – cheaper than recalibration
- High accuracy
- Long lasting battery
- Wireless infrared connection to PC
- Mini32 software support - including basic statistics, regression analysis and user programmable calculation
- Manufactured by EMS



Radiation shield
AI 080

Specifications:

- Temperature accuracy ± 0.2 °C
- Relative humidity accuracy $\pm 2\%$
- Non-volatile memory, typically 100,000 readings
- Operating range:
 - Temperature from -40 to 60 °C
 - Relative humidity from 0 to 100 %



Set with simple radiation
shield Minikin TH2/R

Minikin TH2

Minikin TH2 is small datalogger with built-in sensors for the measurement of air temperature and humidity. It is intended for long-term monitoring.

Minikin TH2 sensors are ready to be mounted in radiation shield AI 080, with various fixing holders. There is also available a set with simpler radiation shield (Minikin TH2/R) - economy solution for installation inside the canopy.

The sensor is ready for easy replacement of measuring chip on site without the interruption of measurement continuity. New calibrated chip is also cheaper than the usual price of similar product's calibration.

The datalogger case is made from stainless steel and polyethylene terephthalate (PETE).

The non-volatile data memory can store typically 100,000 measured values what is enough for more than six years of storing of two measured variables in hourly intervals. According to measuring mode, the new data may be either overwritten on oldest data in the memory or the measurement stops when the memory is full.

The long-lasting primary cell assures more than two-year measurement of two variables in 10-minutes interval. The battery can be also replaced directly on site.

As each EMS system, the datalogger is supported with sophisticated Mini32 software with many advanced features including file linking up and statistics.

Specification

Memory size	256 kB
Resolution	16 bits
Clock accuracy (-10 to 40 °C)	better than ± 15 sec/month
Measuring intervals	30 sec to 4 hrs
Storing intervals	30 sec to 4 hrs
Memory capacity with measuring interval 1 hour	ca 6 years
Battery lifetime with measuring interval 1 hour	ca 5 years
Temperature accuracy	± 0.2 °C (individually tested)
Relative Humidity accuracy	$\pm 2\%$ (individually calibrated within 1% range)
Protection rating	IP60
Protection rating (mounted in radiation shield)	IP63
Size (diameter x length)	30 x 103 mm
Weight	79 g
Operating environment temperature	-40 to 60 °C
Operating environment humidity	0 to 100%
Battery	SAFT LS 14250 CNA

Software:

Mini32 universal software 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.