

Data Acquisition Environment

Hardware – Software – Cloud application www.emsbrno.cz

Minikin RTi/QTi

Main features:

- Built-in sensors for air temperature and radiation (global or PAR)
- Watertight sturdy design (up to 10m)
- · Glass optics
- · Infrared wireless data access
- Non-volatile memory, typically 100,000 readings
- Long lasting battery
- Compatible with radiation shield
- Advanced Windows® software including basic statistics, regression analysis and user programmable calculation



Specifications:

Temperature accuracy ± 0.15 °C

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Minikin

- Radiation accuracy ± 5%
- Operating range:

Temperature from -40 to 60 °C Relative humidity from 0 to 100 %



Minikin RTi /QTi

Minikin RTi and QTi are small dataloggers with built-in sensors for the measurement of air temperature and radiation (global or PAR). They are intended for long-term monitoring. The measuring accuracy, memory size and the overall design overruns most of the similar products.

Glass optics of radiation sensor ensures long-term stability and minimal need for calibration.

Minikin sensors are ready to be mounted in radiation shield Al 074. Radiation shield prevents direct and reflected sunrays from heating the temperature sensor and allows adequate airflow to ventilate the sensor.

The datalogger case is immersible up to 10m, 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 top of 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 replaced directly by user.

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 | 3 sec to 4 hrs |
| Storing intervals | 3 sec to 4 hrs |
| Memory capacity with measuring interval 1 hour | ca 6 years |
| Battery lifetime with measuring interval 1 hour | ca 4 years |
| Temperature accuracy | ± 0.15 °C |
| Radiation accuracy | ± 5% |
| Protection rating | IP68 |
| Size (diameter x length) | 30 x 88 mm |
| Weight | 93 g |
| Operating environment temperature | -40 to 60 °C |
| Operating environment humidity | 0 to 100% |
| Battery | SAFT LS14250CNA |

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.

Two-year full warranty.

QTi – Quantum sensor characteristics:

