

Data Acquisition Environment

Hardware – Software – Cloud application www.emsbrno.cz

Datalogger Minikin ERi/ERi 256k



Main features:

- One channel event recorder
- Writes time and date of an event to the memory
- One second resolution
- Contact closure input is ready for easy connection to any tipping bucket rain gauge
- Daily automatic self checking
- Watertight case
- Mini32 software offer summarizing of events in any demanded time period

Brief specification:

- 128/256 kB non-volatile memory
- 18,000/36,000 time records
- Input signal contact closure
- Battery capacity more than 5 years
- Fully watertight IP 68 rating
- High density Polyethylene case
- Size D22 x 105 mm (without cable)



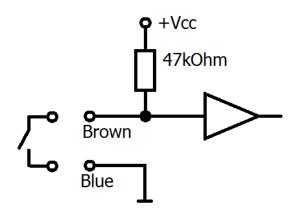
Datalogger Minikin Eri

Event recorder unlike the common dataloggers does not count the number of pulses within given time interval but it stores the exact time of pulse occurrence. This datalogger is designed mainly for registration of output from tipping bucket raingauges with contact closure output signal. The datalogger firmware checks each midnight the system operation and stores the result in the data memory. Therefore, the user is sure about the data reliability (in case of long period without rain for instance, when might be some doubts about the proper operation). When a problem appears in a certain day due to lack of power supply (low battery voltage) or as a result of hardware failure, user's attention is pointed to this day during the data conversion.

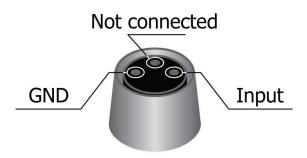
Specification:

Measured values	time of event occurrence – contact closure
Sensors to be connected	tipping bucket rain gauge – contact
Resolution	1 sec
Operating environment	
- temperature	-40 to 60 °C
- relative humidity	0 to 100%
Clock accuracy (-10 to 40 °C)	better than ±15 sec/month
Memory size	128 kB (256 kB for ERi 256k version)
Memory capacity	ca 18,000 time points (36,000 for ERi 256k version)
Battery	SAFT LS14250CNA
Battery lifetime	several years
Power consumption	
- idle	0.02 mA
 close contact – operating 	30 mA
Protection rating	IP68
Size (diameter x length)	22 x 105 mm (incl. connector)
Weight	40 g incl. battery

Wiring:



Datalogger Minikin ERi / ERi 256k - female connector wiring



Standard M8 male connector cable wiring



Brown - Input

Black - Not connected

Blue - GND

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.