

## **Event recorder**

### **MicroLog ER, ERi, ER3, Minikin ERi**

*Brief description*

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## 1. General information

The dataloggers of the ER line works as event recorders. On the contrary to most dataloggers it does not record number of pulses coming within a preset time interval but the time of the event occurrence. Therefore, the data file contain a serie of time stamps. After the downloading of data (in HEX format, see Mini32 user's manual) before the conversion to final (DCV) format the user is asked to chose the time period when the events are sumarized (minutes, hours, days...). However, the file in one second resolution with individual events in the exact time can be created, too.

### 1.1. Manufactured models of event recorders

MicroLog ER (2002 to 2011):



MicroLog ERi and three channel ER3 (2011 to )



Minikin Eri (2012 to ) – fixed on the raingauge frame



All type of event recordes are supported by the EMS software Mini32.

## 2. Data downloading

### 2.1.1. General info:

**FILE OPERATIONS - MicroLog**

☐ El. values   **Add to file**   **Save setup**   **Read setup**   **Export**   **Files**   **Next**   **PrgmCalc**   **Close**

File name: RI0716.hex   Last saving at: 2003-07-16 10:18:40  
Dev. Type: ER   Measuring interval: according to events  
Dev. Code: RI  
Batt: 4.1 V

#	Type	ON/off	Range	Gauge	Description
1.	Events	---	---	Weighted event	Precipitation [mm] - SR03/0.1

RI0716.hex   Press F2 for channel edit; [p] to see the parameters of equations.

### 2.1.2. Choosing the interval in the data file

**MEAN VALUES** [~event.dcv]

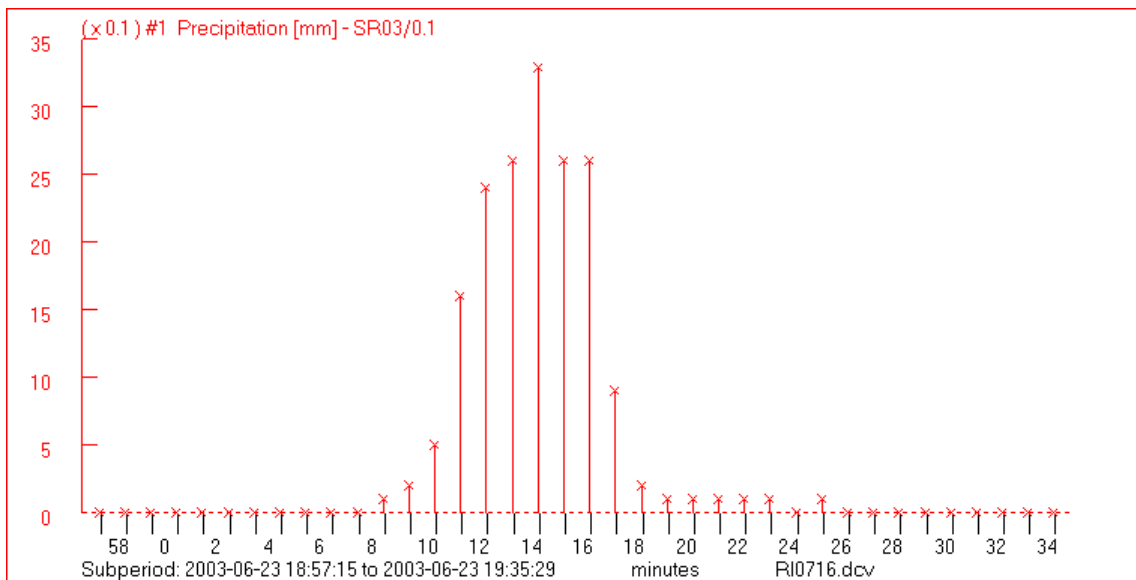
☐ keep original irregular time intervals

Select interval of accumulation

<input type="radio"/> 24 h (24 %)	<input type="radio"/> 4 h	<input type="radio"/> 30 m	<input type="radio"/> 10 m	<input type="radio"/> 3 m	<input type="radio"/> 20 s	<input type="radio"/> 6 s	<input type="radio"/> 2 s
<input type="radio"/> 12 h	<input type="radio"/> 3 h	<input type="radio"/> 20 m	<input type="radio"/> 6 m	<input type="radio"/> 2 m	<input type="radio"/> 15 s	<input type="radio"/> 5 s	<input type="radio"/> 1 s
<input type="radio"/> 8 h	<input type="radio"/> 2 h	<input type="radio"/> 15 m	<input type="radio"/> 5 m	<input type="radio"/> 1 m	<input type="radio"/> 12 s	<input type="radio"/> 4 s	<input type="radio"/> month
<input type="radio"/> 6 h	<input type="radio"/> 1 h	<input type="radio"/> 12 m	<input type="radio"/> 4 m	<input type="radio"/> 30 s	<input type="radio"/> 10 s	<input type="radio"/> 3 s	<input type="radio"/> year

Note that this datalogger registered the time of rain gauge tips occurrence. This option summarized those events within selected regular time interval (usually matching other coherent measurements).

### 2.1.3. Graphical view of selected time subperiod (Mini32 software):



## 3. Notes:

- Export to XLS can be done just from this screen for the selected time subperiod.
- There is a possibility to create more files with different time resolution.
- The logger checks its proper operation and writes zero at midnight if there is no rainy events in current day at all. The possible problems (weak batteries for instance) are reported during data downloading procedure.