

On-Board Event Recorder

The EVR1000 is a railway on-board event recorder that collects information from the vehicle sub-systems, recognizes events and store them on a crash proof memory. In case of accident or incident, the recorded data can be retrieved via an Ethernet interface and analysed with the dedicated software.

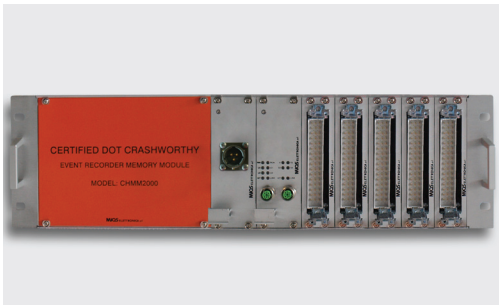
The EVR1000 equipment consists of:

- a power supply;
- a Xilinx Zynq® SoC CPU core with MVB and Ethernet interfaces;
- a modular set of 4 I/O boards;
- a crash proof memory module.

The EVR1000 main tasks are:

- To read physical inputs and data from MVB and Ethernet buses;
- To validate the Input data;
- To recognize the Events;
- To record Event & related Data.

The EVR1000 can be interfaced to a Train-to-Wayside Data Transfer (TWDT) system via the Ethernet interface to transmit the recorded data. Other special tasks (i.e. maintenance test) can be managed via MVB or Ethernet. The recorded data can be retrieved using a PC-based software tool and used for investigation in the event of accidents and incidents. The EVR1000 can easily configured and/or updated by an embedded web server via the Ethernet service port.



MAIN STANDARDS COMPLIANCE

- EN 50155 - IEC 60571 - IEC 61375
- 49 CFR Part 229 rule; IEEE 1482.1-1999; IEEE 1482.1-2013; IEC 626225-1

ENVIRONMENTAL

- Nominal Power supply: 24 Vdc (37,5 Vdc, 72 Vdc and 110 Vdc are available)
- Power consumption: 20W
- Operating Temperature: According to Class TX EN 50155 and IEC 60571
- Dimension: rack 84TE x 3HE
- Weight (In relation to configuration): 14KG average
- Protection: IP40

SYSTEM FEATURES

- Microprocessor Xilinx Zynq® dual core ARM Cortex A9 + internal FPGA
- 512 MB DDR3
- 32 MB NOR Flash
- 256KB FeRAM
- SD Card Up to 16 GB (optional)
- Protected non-Volatile Storage Medium up to 32 GB

STANDARD CONNECTIVITY

- 2 Ethernet 10/100 Base-T
- 1 MVB bus full redundant EMD class up to 4
- 1 CAN bus (on request)
- 4 I/O slots configurable with:
 - 16 full isolated digital inputs board;
 - 2 speed (frequency) inputs + 4 analogue inputs ad 2 relays outputs board;
 - Further available I/O boards with different configuration;
 - Different I/O configuration available on request.