

MVB/ETH Gateway

The RGWD2000 is an on-board railway device that implements the gateway function between the MVB bus and the Ethernet network.

The unit is based on Xilinx Zynq SoC microcontroller with integrated FPGA. It is equipped with a software developed by MIOS Elettronica implementing the TCN protocol over IP to easily exchanging Process Data and Message Data between the MVB bus and the Ethernet network. Process Data are encapsulated in UDP datagram while Message Data are managed using TCP protocol and Remote Procedure Call inter-process communication system where the RGWD2000 device acts as Server.

Protocols such as: TRDP and IPTDcom are available on request. In addition, other protocols can be developed under customer request.

The unit can be optionally provided as “bare-bone” device so that it can be integrated inside an existing 3U railway unit.



MAIN STANDARDS COMPLIANCE

- EN 50155 - IEC 60571 - IEC 61375

ENVIRONMENTAL

- Nominal Power supply: 24 Vdc (37,5 Vdc, 72 Vdc and 110 Vdc are available) or 5Vdc for “bare-bone” version
- Power consumption: 10W
- Operating Temperature: According to Class TX EN50155 and IEC 60571

SYSTEM FEATURES

- Microprocessor Xilinx Zynq® dual core ARM Cortex A9 + internal FPGA
- 512 MB DDR3
- 32 MB NOR Flash
- SD Card Up to 16 Gb (as optional)

STANDARD CONNECTIVITY

- 1 Ethernet 10/100 Base-T (2nd Ethernet interface as optional)
- 1 MVB bus full redundant EMD (ESD and OGF available on request) class up to 4
- 1 isolated RS232/485/422
- 1 isolated can bus (as optional)