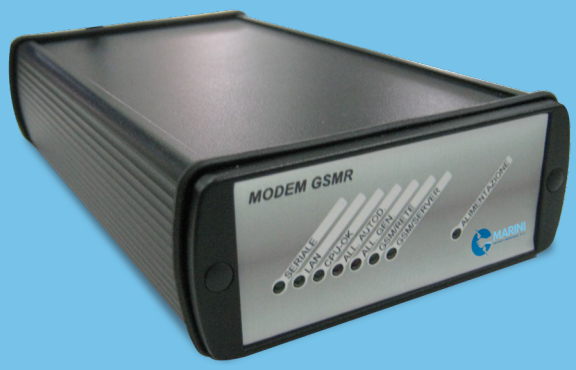
GSM-R Modem



The purpose of IF_GSM-R Modem is to create a data network on the GSM-R channel (Railway) between one or more devices, typically diagnostics devices (MTR, RCE, URD, SMCV, etc.), and a Control Center with the possibility to manage such devices by remote.
This data network is realized by connecting all devices of the system and the Control Center (Server PCP) in a "star configuration". For this reason the PCP has to be equipped with at least one IF_GSM-R configured as "Central" and each devices with a IF_GSM-R configured as "Remote".
Each modem has to be equipped with data SIM Railway (not provided and typically supplied by the railway administrators). The data connection between the IF_GSM-R modems and the devices can be realized via LAN port or via serial configurable port: RS232, RS485 or RS422; with settable speed.

The IF_GSM-R modem has 4 digital inputs for free relay contacts. It can transmit the status of digital inputs via SMS. The IF_GSM-R Modem is housed in a metal box and equipped with an antenna for the transmission. The Modem is equipped with auto diagnostics Led required to simplify maintenance operations.

AUTO DIAGNOSTICS

The auto diagnostics of IF_ GSM-R modem detects internal anomalies and also those of the connected devices, with the generation of proper Alarms.

VERSATILITY

The IF_GSM-R modem allows to connect different devices, typically diagnostic devices (MTR, RCE, URD, SMCV, etc.), or to close a networking data in a loop configuration towards a Control Center (e.g. on twin pair telephone cable or fibre optics).

COMMUNICATION

The radio communication of IF_GSM-R modem it is realized via a supplied antenna and connected directly to the device, or by an external optional antenna in cases of low GSM-R signal.

MESSAGING

The IF_GSM-R modem allows to send an SMS towards configurable telephone numbers, relative to alarms detected by the external equipment via digital inputs.