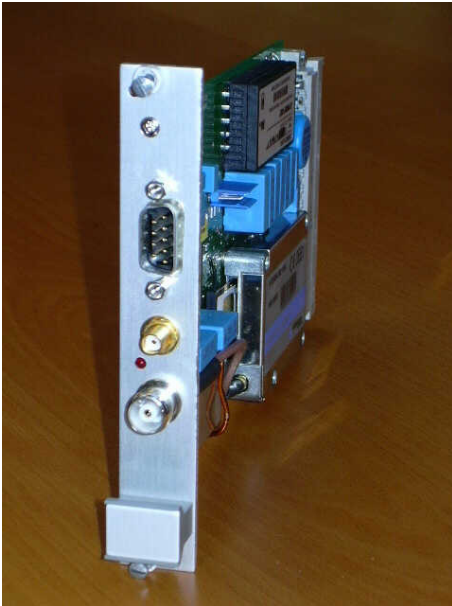
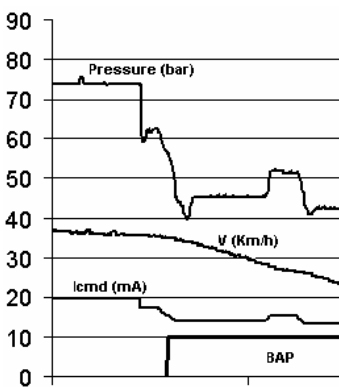


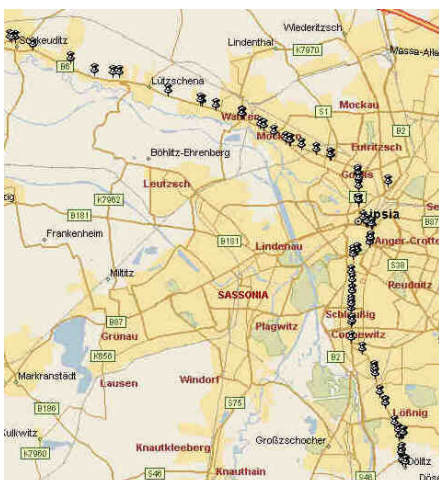
## GPS - GSM-GPRS Location Rx and Tx Ubi\_Loc\_01



The 3U x 4TE plug-in version



Real time remote diagnostics



SMS data from a unit installed on a Bombardier tram in Leipzig (Germany)

### DESCRIPTION

Ubi\_Loc\_01 is a rugged GPS receiver for mobile and railway applications. Featuring GSM-GPRS functionalities it is ideally suited to fleet management applications requiring advanced remote diagnostics capabilities.

### OPERATION

In its standard configuration GPS data are formatted as SMS by the on-board processor, and sent to a SMS Server. The SMS Server runs a database, to which Client applications can connect, via LAN or modem, to display location data (see example at the bottom). The plug-in version is ideal for the C-Sigma Wheel Slide Protection Electronics Ubi\_Conf\_01, whose backplane features a connector specifically for Ubi\_Loc\_01, allowing advanced diagnostics capabilities of brake equipment and wheel-set (e.g.: wearing of wheel diameter). Stand alone versions, packaged to suit specific custom requirements, can also be supplied. The on-board processor, combined with the RS232 and/or the optional CAN interface, allows the custom development of sophisticated remote diagnostics applications (example at left is from an electro-hydraulic brake equipment). For sensitive freights, two orthogonal 2-axis accelerometers allow monitoring of accelerations and shocks along the 3-axis (also useful for derailment detection and "rail-road quality" assessment). Optional use of the available GPRS functionality allows running cost optimization (GPRS traffic is charged, by telecom service providers, on a Kbyte base).

### FEATURES

- Designed and tested (vibrations, EMC, env.) according to EN 50155.
- Protected against supply reverse polarity.
- GPS module features 12 channels, and Multipath Mitigation HW.
- RS232 interface.
- Optional CAN interface allows monitoring of dozens of CAN sensors.
- On-board modem features GSM-GPRS functionalities.
- We can format the data to suit the customer's Information System.
- On-board accelerometers allow monitoring of accelerations and shocks. Also useful for derailment detection and "rail-road quality" assessment.
- Directly pluggable in the C-Sigma Wheel Slide Protection Electronics.
- Battery powered stand-alone custom versions on request.

### RATINGS

- 12V to 36V supply voltage
- -25°C to +85°C operation (Push to Fix mode)
- Plug-in version av. consumption at 24V: 25 mA (in stand-by mode)
- Low Power version av. consumption at 24V: 0.5 mA (with 1 Fix/h)