

Trainborne Recorders



Crash Protected Memory Modules



Mission-Tag Readers



Tone Generators



8-Channels Sound Generator

Safety Speed Indicators



Trainborne Recorders

Trainborne Recorder Unit ◀



The Trainborne Recorder Unit (TRU) is a New Generation universal Ethernet-based product that records in one unit various train information such as ERTMS signalling data, general signalling data, train diagnostic data, voice or even video information.

Linux based product, Ethernet backbone, two M12 Ethernet train links for IPTCOM or CIP communication, integrated optional EN62625 Crash Protected Memory Module, Web-based user interface.

Ethernet, Profibus, MVB, CAN, Voice-recording, RS422, RS485, GPS, GSM, Analog, Speed measurement and Logic inputs interfaces. SIL2 board for KVB interface, SIL2 boards for Deadman, speed measurement and speed thresholds.

The flexible architecture allows easy custom design for specific functions.

▶ IEEE TRU

'US' version of the TRU NG with integrated Crash Protected Memory Module (CPMM) compliant with IEEE1482.1:2013 standard.



▶ TRU XS

Half-rack version of the TRU NG with 2 extension slots and external Crash Protected Memory Module.



Crash Protected Memory Module



The IEEE Crash Protected Memory Module (CPMM) fulfils the US standard IEEE1482.1:2013 standard and the EN62625-1:2013 A and B for crash protection.

Up to 2GB of NOR flash memory, 4 slots for optional eMMC storage up to 1TB, 10/100 Mbit/s Ethernet link, Power over Ethernet, Simultaneous recording of multiple sources.

Designed for stand-alone use in Ethernet-based trains.

The Crash Protected Memory Module (CPMM) fulfils world standards such as the European EEIG 97E461.3, the British GM/RT2472 standards for the Juridical Recording Unit (JRU) or EN62625-1:2013 A and B for crash protection.

Up to 2GB of NOR flash memory, 10/100 Mbit/s Ethernet link, Power over Ethernet, Simultaneous recording of multiple sources.

Designed for stand-alone use in Ethernet-based trains.



The Trainborne Recorder Unit Lite (TRU Lite) is a compact unit especially designed for metro or tramway applications.

Speed measurement interface, speedometer interface, 16 logic inputs, 1 logic output, RS422/RS485 interface.

Two M12 Ethernet train links for IPTCOM or CIP communication, integrated Memory Module or external Crash Protected Memory Module, Web-based user interface.



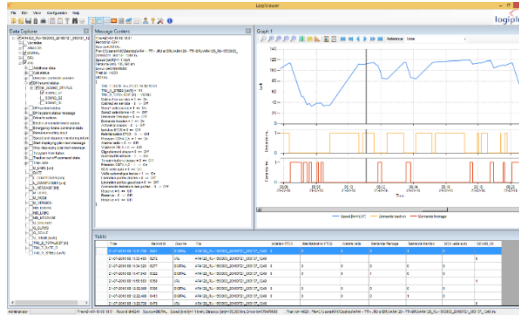
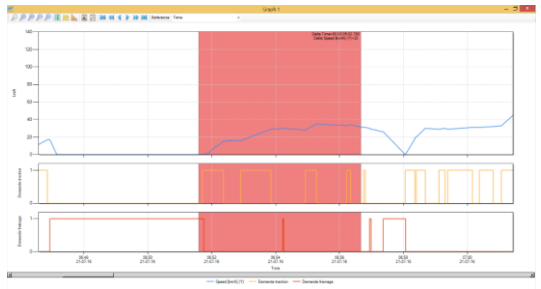
Trainborne Recorder Unit Lite



LogiViewer



LogiViewer is the licence-free data analysis tool for our recorders. Last generation .NET development, fully flexible user-friendly multi-screen interface, display of data on graphs or tables, powerful filtering, search and sort functions, export to open-format.



Speed Indicators



Safety Speed Indicators

A range of single- or double-needle speed indicators and Cab displays with galvanometers, servo-control motors or liquid crystals.



These indicators are designed to make access to more secure speed information by means of sophisticated back-reading devices. These specific requirements are especially imposed for train traffic on the SNCF network, which has incidentally sanctioned several of our indicators.



Backup Speedometer



Displays train speed in MPH or KM/H when the ERTMS cubicle is isolated. 0-10V or 0-20mA input, adjustable end of scale. On-board reprogrammable by means of a USB Memory Stick.

Backup Speedometer is directly powered from the train battery.



GPS Clocks

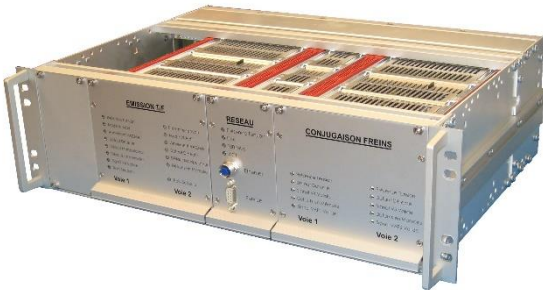
▶ GPS synchronised Clocks

GPS synchronised clock for accurate time display. Local time base with power back-up. Automatic setting for summer and winter time. Displays time and day of the week. Current loop link NF F-69010 and serial link RS485.



Some SIL2 Products

SIL2 PWM Controllers Traction and brake control



A range of SIL2 or SIL0 PWM Traction/Brake controllers to set the speed of the train according to the traction/brake effort value imposed by the driver and regulate the train speed in cruise control mode.

Full control of the air brake.

Redundant equipment with 'coupling-decoupling' and 'car-wash' functions.

▶ SIL2 Access on board for Passengers in wheel-chair

The system automatically detects the platform height in the station and activates the right step for the access to the train.

For the "high level" platforms, the system authorizes the sliding of the upper step called 'gap filler' that fills the space between the platform and the train and allows access on board with a wheel-chair



Tone Generators

Railtone NG

Railtone NG is a fully static digital sound generator for train cabs and cars platforms. Twelve universal logic inputs are used to control the sounds generation. Automatic Sound Pressure Level adjustment. On-board reprogrammable by means of a USB Memory Stick. RS485/RS422, CAN and Ethernet available for remote control. PoE version available.



Railtone Evolution

Railtone Evolution has three or six universal logic inputs used to control the sounds generation and a RS485/RS422 serial link. Automatic Sound Pressure Level adjustment. On-board reprogrammable by means of a USB Memory Stick.

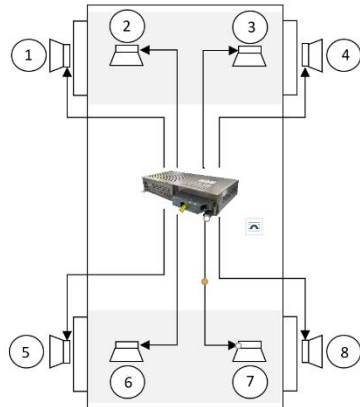
Railtone Evolution is directly powered from the train battery.

Railtone Octa

Railtone OCTA is an 8-channels fully static digital sound generator for train passenger's platforms.

Different sounds can be played simultaneously on each channel or the same sound can be played on one or more channels. Individual adjustment of the sound level.

Sounds are triggered by means of the ethernet link that can support several protocols such as C/IP or TRDP. An optional I/O board is available with 10 logic inputs to allow I/O sounds triggering.



Mission-Tag Readers

SOLO Badge Reader

The SOLO Badge Reader System is especially designed for last generation trains with a full Ethernet communication architecture.

Each SOLO is stand-alone without need for a 'central unit'. On top of the internal RFID frontend, two remote frontends or a keyboard can be connected to the SOLO.

RFID technology @ 13,56 MHz. Ethernet connection, SD-Card for black list and log book management. Logic inputs and Voltage free contacts for door gate control,...

Optional SAM module for Calypso technology.

Calypso
Networks Association



Keyboard Frontend

Keyboard Frontend is connected to the SOLO. Used in case driver's badge is lost or for maintenance staff with a temporary ID code.



IP67 RFID Frontend

IP67 Frontend is connected to the SOLO. Easy integration in train wall (IP40 version) or near to the track where IP67 is required.

Desktop RFID Frontend

Desktop Frontend is connected to the SOLO. Designed for integration on the desktop. Optical detection of badge inserted.



SOLO Air

The SOLO Air includes a GSM transmitter for real-time communication with the access authorization ground server.



System with Central Unit

First generation System with a central unit and up to six base stations located near the train doors or in the dashboard.

RFID technology @ 125 kHz or 13,56 MHz.
Ethernet connection, 2 GB SD-Card for black list and log book management. Voltage free contacts for door gate control,...



About Logiplus



- Over 30 years of experience in design and production of Railways Electronics
- Over 80.000 products in service around the world
- Reliable and make-to-last products
- Proven SIL2 and Safety expertise
- IRIS and ISO9001 certified for design, production and long-term maintenance
- Small and very skilled Team → higher reactivity!
- Integrated approach: from customer specifications to long-term maintenance
- Full traceability from part level to equipment level
- Very high quality standards: No low-cost sub-suppliers
- LogiPlus is located 40 km south of Brussels, next to the Brussels South Airport