

## UTM512

### A new Equipment for chronological recorder

**UTM512** is an equipment for event acquisition and registration in railway signalling systems, and constitutes the evolution of the technology already used for the UMAR8, in particular it is placed in the station and it is totally autonomous for the acquisition, memorization and centralization of events towards a Main Centre in the station with UTM48 are a complete system that solves the problems concerning the acquisition and registration of railway events, respecting.

#### FUNCTIONAL CHARACTERISTICS

**UTM512** is destined to chronological recording of events mainly constituted by variations of relay state, recorded through contacts and acquired through digital input boards. The main memorization support for events and data regarding the UTM512 state (self-diagnostic) is made up of a memory card with a minimum capacity of 64MB.

The main functions of **UTM512** are:

- Acquisition of device state;
- Association of the "time" information considering the state of railway events;
- data recording on local memorization supports (disk on chip and memory card);
- calendar clock managing;
- event maintenance time calculation;
- self-diagnostic;
- web communication.



#### ARCHITECTURE

UTM512 is made of the following functional sections :

- a) **Base Unit with 240 input**
- b) **N°1 Auxliary Unit with 144 input**
- c) **N°2 Auxliary Unit with 144 input**

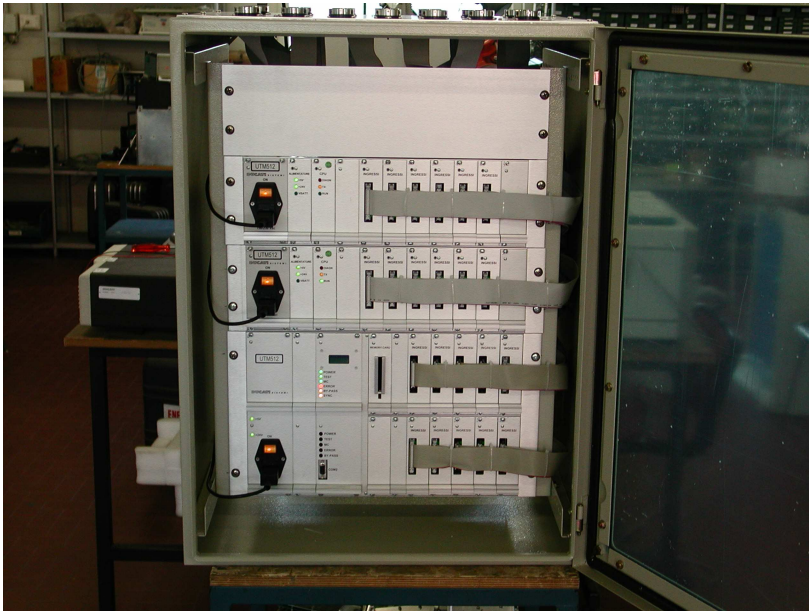
- 1) Inputs isolation section for all Unit is allows interfacing to the railway plant, of which it is necessary to record state variations, guaranteeing electrical isolation of the devices from the plant itself.
- 2) Acquisition and Recording Section
- 3) Transmission Section. In the centralized mode, it has the link with the Central Point active, transmits the acquired events and, moreover, as is typical in the nonlooked-over mode, accomplishes a self-diagnostic of the UTM512 HW+SW complex.

## REPORTING FUNCTIONS

Memory card reading, conversion in Windows ambiente and its data printing, afer UTM512 removal, are always possible.

## SELF-DIAGNOSTIC

**UTM512** features peculiar self-diagnostic programs functioning "on-line", which allow fast damages identification, making easy the device maintenance. Those damages are locally signalled, on luminous leds, recorded and, moreover, a clean switch contact for generic malfunctions is available; it switches over in case of an hypotetic alarm.



## FEEDING

**UTM512** is ready to be fed at the 150 Vca tension (+10%, -15%) and at 50 Hz frequency (+,-2%); moreover,for tension interruptions not higher than 100 ms., the correct device functioning is equally guaranteed.

## MECHANICS

**UTM512** is built around mechanics founded upon 6U rack 19" for the base unit, and 12 rack 19" with the auxiliary unit.

## OPTIONS

**UTM512** is ready to feature the following optional elements:

- device for receiving the sincronization of the clock from the GPS radio signals;
- station clocks driving signal according to FS rules;
- modem, by means of UTM512 must have the chance to link to a centralized System;
- battery/battery charger module, external to the device.