

# DUCATI energia

## UTM48



**UTM48** is an equipment for event acquisition and registration in railway signalling systems, in particular for those placed along railway lines. Its main feature is the absolute independence from the RCE placed in the station: therefore, it is totally autonomous for the acquisition, memorization and centralization of events towards a Main Centre in the station. UTM48 is a complete system that along with UTM512 Station RCE, solves the problems concerning the acquisition and registration of railway events, respecting.

### FUNCTIONAL CHARACTERISTICS

**UTM48** 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 UTM48 state (self-diagnostic) is made up of a memory card with a minimum capacity of 32MB.

The main functions of **UTM48** 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 (UTM48 for non-stand-alone use).

### ARCHITECTURE

UTM48 is made of the following functional sections physically unpartable:

a) Inputs isolation section. It 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.

b) Acquisition and Recording Section (the heart of the UTM48 unit).

c) 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 UTM48 HW+SW complex.





### **REPORTING FUNCTIONS**

Memory card reading, conversion in Windows ambience and its data printing, after UTM48 removal, are always possible.

### **SELF-DIAGNOSTIC**

**UTM48** 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**

**UTM48** 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**

**UTM48** is built around steady and functional mechanics, based on a locker with a hinged door and a removable lock to avoid unwanted accesses, and with a see-through window which allows the reading of the luminous signalations when the device is shut.

### **OPTIONS**

**UTM48** 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 UTM48 must have the chance to link to a centralized System;
- battery/battery charger module, external to the device.