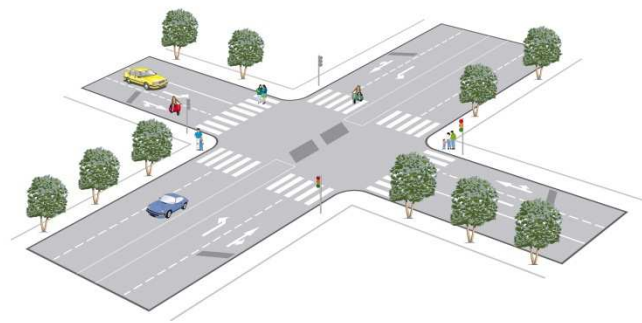


M@ESTRO – Data Sheet



M@ESTRO Traffic Signal Controller is designed to comply with the following 3 main principles :

- To ensure a full safety to the users of the traffic lights installation by using extra safeties exceeding the in force norms and specifications,
- To guarantee future development and evolutions (SD memory card, WiFi link, GPRS port),
- To deliver user friendly equipment : easy programming, easy operation and maintenance.

Traffic Management

Traffic signal controller

M@ESTRO is a Fully Microprocessor based Traffic Signal Controller. Main parts are :

- **A rack** including :
 - a CPU board,
 - a Power Supply equipped with a energy analyser,
 - a back-lighted screen,
 - 1 up to 8 signal group boards (each capable to power 4 signal groups),
 - 1 or 2 Input/Output boards.
- **The Cable Terminals**
- **The Detector Amplifiers**
- **The various Power Protections** and the Outlet for maintenance purpose located on a rail.

M@ESTRO Hardware Capability

- 4 to 32 signal groups, expendable to 64,
- 10 to 60 input expendable to 128,
- 0 to 30 output expendable to 48.

M@ESTRO Software Capability

- can manage up to 8 intersections,
- 48 signal groups, expendable to 96.

The M@ESTRO Traffic Signal Controller Programming software is developed under Windows environment ; 3 kinds of windows are used to display the available information :

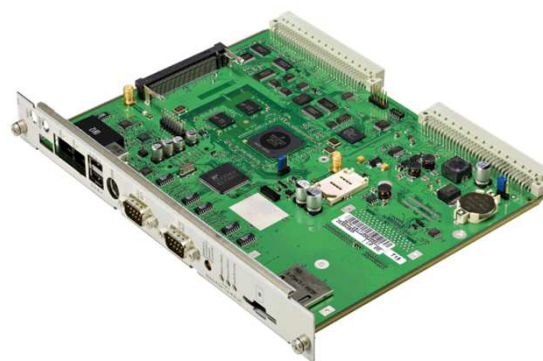
- a main window,
- dialog boxes for data acquisition,
- a display window for displaying the traffic light operating diagram.

CPU board :

The CPU is a AXIMUM Produits électroniques Design, it is CMS technology based.

Key features are :

- uses a MPC 8313,
- OS is LINUX 2.6,
- 128 Mb DRAM expendable to 256 Mb,
- 64 Mb flash memory expendable to 128 Mb,
- 512 Mb SD expendable to 32 Gb (event storage including data storage and counts),
- link with GPS module,
- 2 RS 232 serial ports,
- 2 USB Master ports,
- 2 Ethernet ports,
- Additional ports area available for connecting :
 - a GSM 3G modem (PCMCIA port),
 - a WiFi module (mini PCI connector),
 - an external GPS module.



CPU board

• **SIGNAL GROUP Board :**

- manages up to 4 signal groups,
- checks and powers low tension signal Led (110-230 volt) and very low tension signal Led (24-48 v),
- this board is microprocessor based and allows:
 - to switch on and off the signals according to CPU commands,
 - to inform the CPU about the actual colour status (voltage & current monitoring) and the good execution of the orders. Current and voltage thresholds are programmable.



Signal group board

Each actual colour of each signal group is clearly displayed by a LED.

• **POWER SUPPLY Board :**

- in charge of the various needed kinds of power supplies,
- manages the mains supply energy: high and low thresholds, micro failures,
- manages amber flashing safety mode or extinguishing mode according to the in force specifications,
- checks the programs and the safety program in particular (watch dog),
- ensures energy analysing function (frequency, voltage, micro failures recording).



Power supply board

• **New integrated function :**

The integrated WEBSERVER allows signal controller mode of operation remote displaying via Internet.

• **M@estro complies with the following norms/standards :**

NF-C 70 238, NF-C 70 238 A1, NF EN 12 675, NF C 15 100, NF C 17 200, EN 50 293, CEI 60 536, NF P 99 071, EN 60 068.

Traffic Management

Traffic signal controller



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