

LS300

Traffic Controller



Traffic controller LS300 is a microprocessor control system with 16 lamp outputs and 8 programmable digital inputs. The interface "man-machine" has been carefully developed, providing LS300 with a wide LCD display with 80 characters, so that it always gives a clear and intuitive indication of way of working; it supplies the monitoring and recording of temperature, power voltage and power consumption of the installation in real time, which are essential information in case of irregularities or breakdowns.

LS300 has been wholly manufactured with solid components, according to all CE standards, in particular it complies the requirements of EN:50556:2011-02..

OPERATIVE FUNCTIONS

- flashing
- all red
- manual with control through pushbutton or radio remote control
- automatic with fixed times
- synchronized
- actuated by the traffic with cancelled and/or extended phases
- preferential phase to public or emergency means of transport
- automatic change between summer time / daylight time
- monitoring of power voltage and the current flow of each lamp
- connected to verify and indicate possible failures
- remote control with automatic sending of messages via modem in case breakdowns occur

GENERAL CHARACTERISTICS

Traffic controller mod. LS300 has been produced for controlling vehicular and/or pedestrian traffic, both in an independent and in a centralized system. The traffic controller is able to record information concerning the traffic and to assure in any moment the control and the transmission of data to involved authorities.

TECHNICAL FEATURES

- Multiboard structure for an easy maintenance.
- 12 lamp outputs all checked by current flow so as to indicate a possible lack of charge or increasing charge
- 4 auxiliary outputs to be set up as lamp, relay output
- 8 digital and programmable inputs
- 8 independent programs with different structures and times, selectable from LCD panel, remote control or from internal weekly tables that can be programmed RS232 through PC
- 1 serial port RS232
- Completely programmable ON-SITE.
- Entry password that allows to change installation times also from LCD panel
- Maximum load for each output 800W
- Centralizable with GSM/GPRS technology
- Also available in LS312 version with 12 Vcc power for traffic light system with photovoltaic panel
- Software language Italian/English

CONTROL AND SAFETY

With reference to UNI EN 12675 norm, the traffic controller assures a series of cyclic control circuits and on Hardware that have been differentiate in order to give a complete security on all outputs.

In particular the traffic controller is provided with the following controls:

- "Conflicting Greens": check of switching on of green lights, following a programmable matrix;
- "Intergreen": control of inter-time among green lights, following a programmable matrix;
- "Lamps burnt out": voltage control on all the outputs of the traffic controller
- "Program error": verify the installation program and that times programmed are exact
- "Current control": check of current flow on all the lamps present on the installation

The intervention of one of the controls causes a state of alarm that, according to the seriousness, puts the installation in "flashing mode" or just indicates, through display or GSM modem, the failure to the personnel in charge of maintenance service.

LS300 is also provided with a register of events ("Black box") where it stores the occurrence of any alarm or failure, recording date and time of the event, temperature and voltage supply, state of traffic controller, active program in that moment. Traffic controller programs and the black box are recorded on different memories, both EEPROM type.

SETTING UP OF TRAFFIC PLANS

The configuration software has been studied for technicians/installators and it has been developed in Windows® operating system. If new plans are needed, these can be developed while the controller is operating, without having to switch of the signals.

It is possible to test the program viewing it on video before downloading it through serial connection to controller.

Moreover, it is possible to download different plans to a controller without stopping its functioning; this can be done through entrance procedure protected by password, in order to guarantee the access only by authorized personnel.

APPLICATIONS

Traffic controller LS300 is flexible and easy to use and it is mostly recommended in the following situations:

- Crossroads with 4 streets with or without pedestrian crossing, with 2, 3 or 4 phases
- T junctions
- Pedestrian crossing with or without speed control devices
- Alternate one-way street
- Access control in tunnels

CENTRALIZATION ON TMACS PLATFORM

LS300 is Centralizable on TMacs Platform.



TECHNICAL DETAILS	
Basic sizes (signal groups)	4
Loop detectors	4,8
Video detectors	Traficon
Voltage	230 V ac±15% 12 V dc
Ambient temperature	-40 - +80°C
Load per output	Max 800 Va
I/O interfaces	12V, 100 mA
Cabinet (large)	600x1100x350mm
Cabinet (small)	320x940x290mm
Communication	RS 232
System connections	TMacs
Certifications	EN-50566 EN-50293