

EMERGENCY MONITORING SYSTEM (EMS)



Description:	In buildings where is a need to install a large number of independent emergency lighting fittings, there is always a problem related to the process of controlling the condition of the fittings. Manual controlling of the fittings condition requires a lot of time and may sometimes disturb the regular use of the premises. Emergency monitoring system, designed to monitor the operation of emergency fittings with independent power sources, was created to solve this problem. Modern solutions of the system allow the configuration and control of the fittings condition from one place.
Specification:	Standard monitoring of 750 fittings with the possibility of extension up to 4 000 fittings. LCD monitor displays current system state. RJ45 socket for communication via any web browser. White polycarbonate body. Smaller monitoring system can be chosen for medium and small size buildings to monitor up to 500 fittings. Comes without LCD monitor, control unit mounts on TH-35 (DIN-3) rail.
Installation:	Communication is run through UTP CAT6 cable. Distance between the control unit and the furthest fitting – 1200 m, with possibility to extend the communication cable distance by another 1200m using the signal amplifier.
Application:	For informational purposes when electricity supply fails.

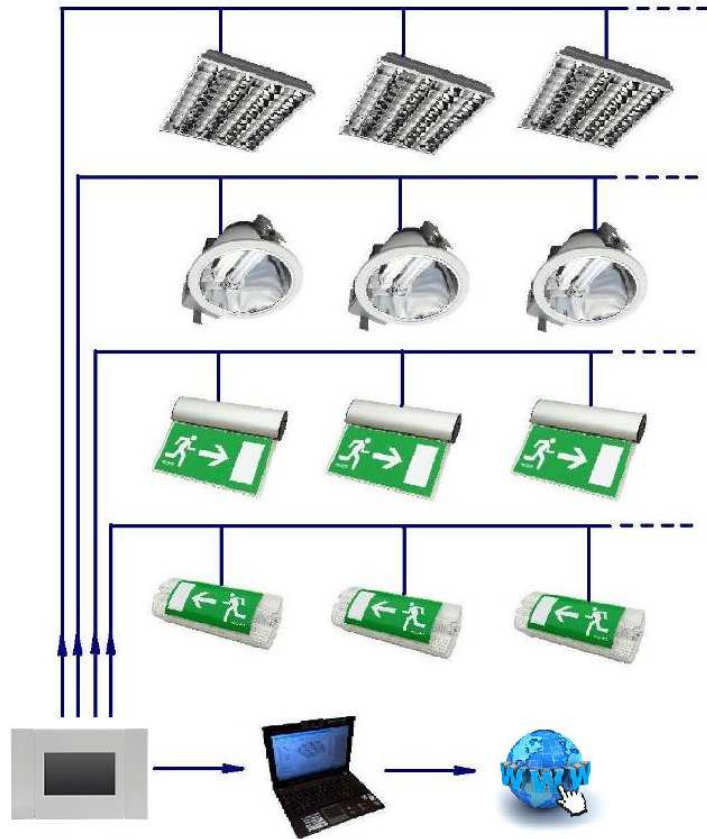
COMPONENTS OF THE SYSTEM:



Nova NG EMS addressing emergency modules with unique individual address for magnetic and electronic ballasts. One-hour or three-hour standby operation with a recharge time of 24 hours. Addresses assigned by factory, no programmer is needed.
Green diode signals correct battery charge.
Red diode signals abnormal functioning of the fitting.
Ambient temperature: 0°C to +55°C.
Tmin -25°C, option available on request.

FUNCTIONS OF THE SYSTEM:

- Constant communication between the central unit and the lighting fittings
- Running auto tests
- Running manual tests
- Registering test results (memory of central unit – minimum 1 year)
- Emergency operation blockade
- Dividing the monitored fittings into groups
- Reporting any abnormalities
- Connecting with a PC computer through an interface and creating visual presentations with the help of a special software
- Test calendar configured to suit individual needs
- Works with BMS (Building Management System)



Lighting fittings working under the system have unique addresses and are connected to Emergency system control unit with a communication cable. The fittings communicate with the central unit reporting any abnormalities which are signaled on the central unit display with LED diodes placed on the central unit panel. Each fitting connected to the system may have an individual description in the control unit. When abnormalities, related to the operation of a fitting, occur, information about the type of abnormality and the location of the fitting appears on the display of the control unit. The system allows manual testing of a single fitting. Central unit's software allows dividing the fittings into groups which enables one to run tests only chosen groups of fittings. Apart from manual tests, the following auto-tests are carried out:

TEST A – a short test, recommended every 30 days (LST-EN 50172) – checks the following parameters:

- Enforcing emergency operation of the fitting for 5 minutes
- Control of battery power discharge
- Control of minimum voltage of battery

TEST B – a long test recommended every 360 days (LST-EN 50172) – checks the following parameters:

- Enforcing emergency operation of the fitting for the time programmed for each fitting (1, 2, 3 h)
- Control of battery power discharge
- Control of minimum voltage of battery
- Control of the condition of battery

The frequency of running tests A and B may be programmed according to the needs of the user. There is a possibility of programming the tests with exact dates, when they should be carried out. Long tests B should be run when the premises are not used within 24 hours after finishing the test. This time is needed for the recharging of the batteries discharged during the long test.

Test results are stored in the memory of the central unit and may be viewed on the central unit's display. Test reports may be printed with any printer.