Smart-Traffic-Light System

The Wärtsilä Smart-Traffic-Light system is a complete and standalone system for audible and visible alarm annunciation into machinery spaces.

The traffic light system (TLS) consists of one or more control units (based on SRtP requirements) and several alarm columns.

The control unit (CU) is the main device of the Traffic Light system, it collects inputs from the external alarm systems and it is equipped with a local buzzer and a siren.

A touch screen HMI is the operator interface and gives indications as system status, alarms activation and basic configuration.
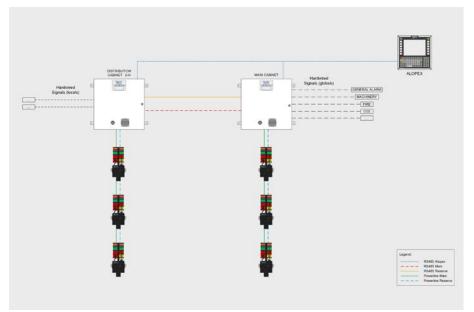
Applications

Traffic light system is designed for all on board ship applications where the continuous indication of ship alarms is necessary in every part of the machinery space.

The scalability is the strength of our TLS, which allows the installation of multiple CU.
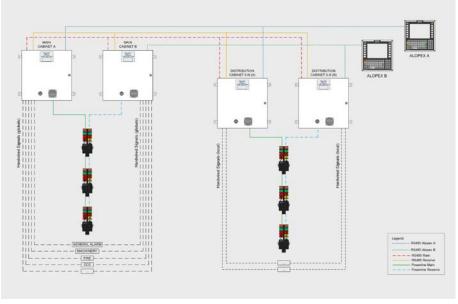
This results not only in a significant reduction of cable length and in an increased reliability of the system but also in the possibility to fulfil SRtP requirements.
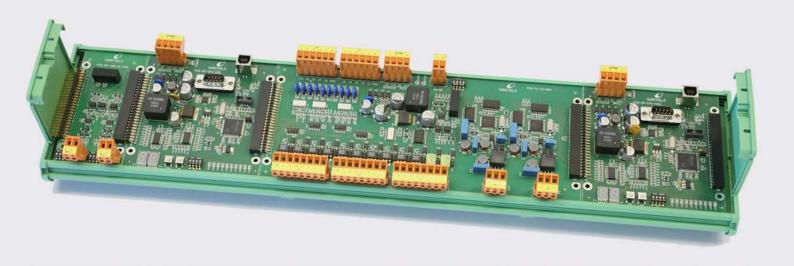
Main Features

- Fully redundant communication line
- Fully redundant 230 Vac power supply
- RS485 communication using a power line bus.
- Self-diagnostic system
- Indication light by LED technology
- Full/partial alarm columns test by a touch screen HMI
- Fire box protects cable integrity in event of fire
- Up to 96 alarm annunciators customizable on request
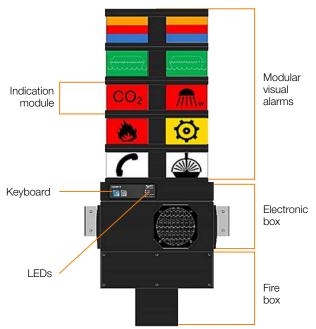- Low power consumption

System layout with multiple CUs

System layout with multiple CUs in SRtP configuration

Alarm Columns

- Alarm Column (AC) is a standard and configurable unit, with roof or floor mounting, which provides audible and visible alarm annunciation in machinery spaces. Each AC is made of an electronic box, a modular visual unit and a fire box.
- The electronic box contains the hardware to convert signals over power line into visual and audible alarms and includes:
  - A speaker, with an acoustic pressure of 110 dB, to generate the audible alarms.
  - An external keyboard to test lamps and siren (monotone and bitonal) and to monitor communication activity and power status.
- The modular visual unit can handle up to 5 indication modules based on LED technology visible over 290°.
- The fire box protects the cable in event of fire (IEC 60331) through a sealed connection between power supply/communication line and electronic box.

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