

BCSLT-RF868

Traffic Light Control Box

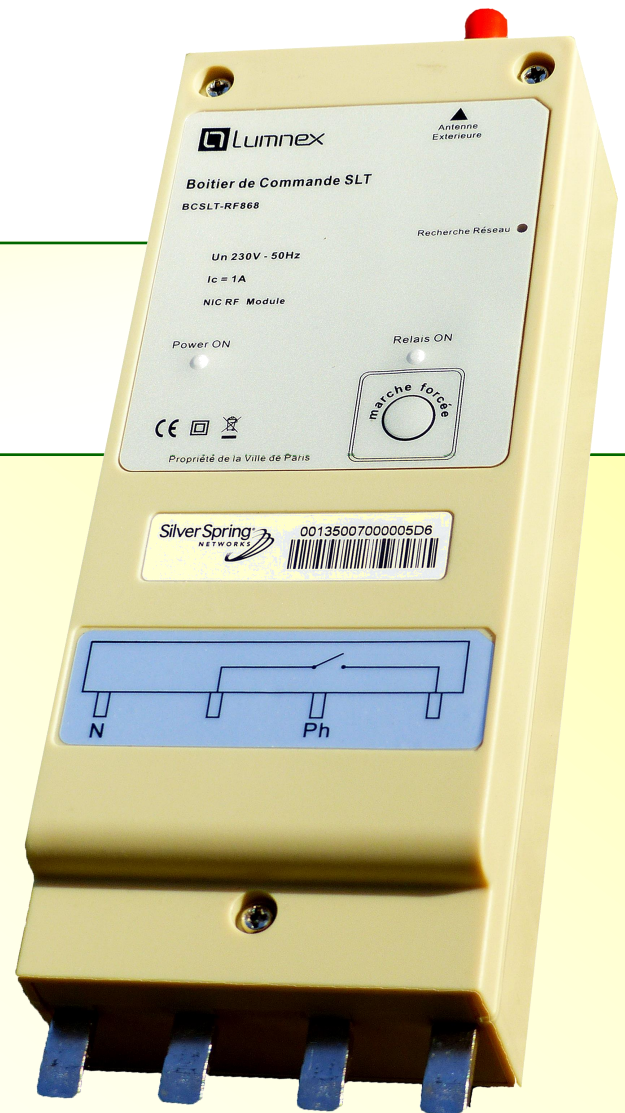
Main Features

- The traffic light control box BCSLT-RF868 is designed to replace the Ripple Control Receivers (PULSADIS) for traffic light synchronisation.
- The BCSLT product provides time synchronisation for the traffic light control system, by opening and closing a relay twice a day at very specific times
- In case of network failure, the traffic light synchronisation is still ensured using embedded Real-time clock
- Unlike the monodirectionnal PULSADIS system, the BCSLT-RF868 enables bidirectionnal communication, allowing the reading of operational parameters from the whole controlled traffic light line.
- Each BCSLT becomes an element of a RF mesh network (868Mhz) on the whole controlled area

Functionality

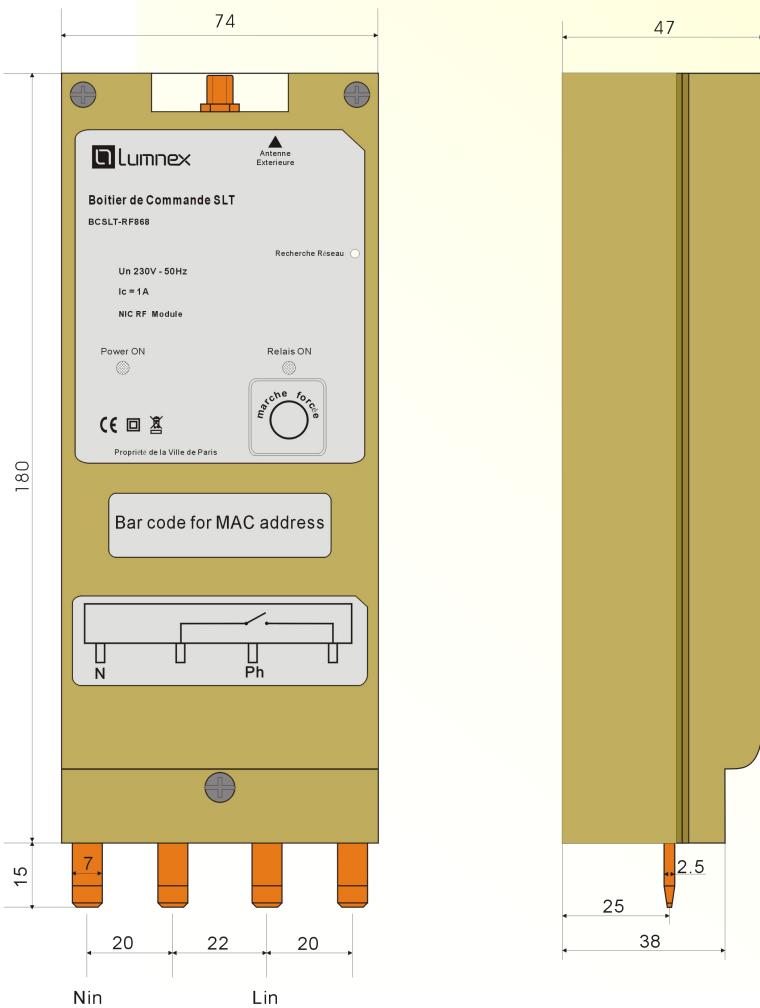
- Interchangeable module « 1 for 1 » with existing PULSADIS module
 - Synchronisation commands send using RF by central management system
 - Synchronisation hours modifiable by RF
 - Bidirectionnal radio communication for diagnostics / command acknowledgment
 - Real-time control and management
 - Remote monitoring using StreetLight Vision central management system.
 - 3A dry contact output relay
 - Real-Time embedded clock in order to ensure time management during 24 hours in case of power supply failure
 - Detection and alarms of power supply failures
 - Override push button in the front and light to acknowledge the status of relay
 - SMA connector for external antenna

- Communicating RF mesh network with the following protocol and characteristics :
 - Frequency 868 MHz : Emission power : 27 dBm, sensitivity : -102 dBm, baud rate : 100 kb/s
 - Frequency 2,4 GHz : Emission power : 24 dBm, sensitivity : -98 dBm, baud rate : 500 kb/s
 - Frequency 870-876 MHz : Emission power : 27 dBm, sensitivity : -102 dBm, baud rate : 100 kb/s
 - Network protocol : IPv4, IPv6, DTLS, UDP, TCP, SNMPv3, IPSEC, PKI norme X.509, pare-feu L3/L4
- Timing synchronization within 1s
- Protected SOC and Bootloader
- Commands, informations and programmations :
 - Real-Time command using SLV
 - 365 days calendar (366 leap year), 2 events per day
 - Feedback informations on the commands and orders
 - BCSLT status
 - Network status



Technical Characteristics

Supply Voltage	180 - 275 Vac
Frequency	47 - 53 Hz
Average power	2W
Relay Type	Dry contact output relay
Relays cut-off ability	3A
Protection against overvoltages	8 kV
Operating temperature	-25°C to +65°C
Operating limits	-40°C to +85°C
Humidity	0 to 95 %
Weight	380 g
Enclosure protection	IP 52 with vertical assembly IP 50 with horizontal assembly
Life Span	> 15 years



Mechanical design

Standards and European directives

- **Radio :**
 - Directive RED (2014/53/UE)
 - EN 300-328
 - EN 302-208
 - EN 303-204
- **Health :**
 - EN 62479 : 2010
- **EMC :**
 - EN 301489-1 et -3
 - EN55022
 - EN 61000-3-2
 - EN 61000-3-3
- **Electrical Safety :**
 - Directive 2014/35/UE
 - EN 60950-1
- **Environment :**
 - RoHS
 - WEEE

Revision date : 09/05/2018