



Communication Controller E924 with GPS support

The new version of the Communication Controller E924 offers in addition GPS receiver support and mobile phone Short Message Service (SMS) support. It is designed for the long-term operation in field conditions

Basic Features

- Communication between a light and the regional monitoring and control centre. Communication over the LAN of a light with up to 23 nodes
- Regular polling of the LAN's nodes (other equipment units of a light) in every 15 minutes
- Programmable time scheduling of regular communication sessions, and immediate sending of the emergency messages to the control centre
- Responding to the commands and inquiries from the regional monitoring and control centre
- Measurement and recording of 5 analogue input signals in every 15 minutes, the last 256 records are accessible. Checking of contact sensors (tampering, fire, ect.) and sending of emergency messages to the control and monitoring centre
- Recording of statistical data about the quality, time and results of last 32 communication sessions
- Programmable scheduling of mobile phone standby mode in order to save energy



GPS features

- Receiving and periodical recording of the GPS signals with the period specified by the user.
- Adjusting of the built-in clock/calendar based on the GPS signals and sending of the time adjustment signals to the other nodes of a light.

Short Message Service (SMS) features

- Sending of the SMS emergency messages to the user-specified mobile phone in case of receiving the emergency signals from the inputs AN4 and/or AN5
- Responding with SMS messages describing the current state of a light to received SMS inquiries

- Execution of commands issued by servicing personnel in the form of SMS messages or forwarding them to other units within a light (e.g. switching ON/OFF of a light at daytime)
- Sending of the synchronizing SMS messages to the user-determined mobile phone (a communication controller of another light)

Specification

Input voltages	9 - 20V DC, optionally up to 29V
External contact sensors voltage	5V, output resistance of voltage source 1k Ω
Current consumption in standby	1.5mA (GSM receiver OFF)
in alert mode	50mA max (GSM receiver ON)
in communication mode	250mA max (GSM transceiver ON)
current of GPS receiver	80mA
Deviation of coordinates with 95% probability	$\pm 10m$ $\pm 100m$ "with selective availability activated"
Communication media	GSM-900 mobile telephone network
Minimum GSM input signal level	-70dBm (input 70.7 μV on 50 Ω load)
Power of GSM transmitter	2Wmax
Communication data rate	9600bps with GSM and LAN, 4800bps with GPS receiver
Local area network (LAN)	RS485 based, maximal length 1.2km
Voltage range on 5 analogue measurement inputs	0 - 5V, 8 bit resolution
Inputs, outputs	GSM antenna, GSM handset, RS485, 2xRS232 (one for GPS receiver), 5 analogue measurement inputs, contact sensors
Temperature range	-20°C to +55°C* (IEC 68-2-12,14)
Relative humidity	max 98% at +35°C (IEC 68-2-3)
Dimensions	70x210x183mm
Weight	2.4kg

*) the temperature range can be optionally extend

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