



GPS locator E934

The purpose of the locator E934 is the position and time determination using the signals of the Global Position System (GPS). The position determination will be used for automatic detection of the buoy drift, the time determination is used for the synchronization of flashing of various aids to navigation. It consists of a GPS receiver and a microprocessor based control unit, designed as a robust compounded device

Features

- Periodical receiving of the GPS signals with the user-defined period
- During every receiving session the deviations will be determined:
 - between the GPS coordinate values and stored nominal values;
 - between the GPS time value and the value of the built-in clock
- Computing and storing of the mean value of geographical coordinates. For this the coordinate values of 256 last receiving sessions will be stored in the memory
- Sending the time messages to the Abus local area network for adjustment of the built-in clocks of local system units
- Sending emergency messages to the communication controller, connected to the Abus when
 - deviation of the geographical coordinates is greater than a pre-set value;
 - deviation of the mean value of geographical coordinates is greater than pre-set value;
 - the GPS signal could not be received during the proper time;
 - the voltage on the GPS receiver is below the pre-set limit



Optionally, the functions of GPS locator can be reprogrammed to address the specific requirements of the customer.

Specification

Input voltage

9 - 30V DC

Current consumption when stand-by	1.5mA
when receiving GPS signals	200mA
Deviation of coordinates with 95% probability average over 8 hours	±15m ±100m with "selective availability activated" ±50m with "selective availability activated"
Time accuracy of the output message	better than 10ms
Stability of the built-in clock	±10ppm (when no GPS signal available)
Stability of the rising time of 1 Hz synchro-puls	not worse than ±5μs
Period of the receiving of GPS signals	from 1 minute up to 2 hours
Format of timing messages	Y,M,D,Min,Sec,mSec
Period of time messages	from 1 minute up to 2 hours
Date rate at the Abus	9600bps
Temperature range	-30°C to +60°C (IEC 68-2-11, 2, 14)
Relative humidity	max. 98%, at the temperature +35°C (IEC 68-2-3)
Dimensions	70x210x183mm
Weight	1.8kg

E934-20012302