



GPS locator E931

The purpose of the locator E931 is the position and time determination using the signals of the Global Positioning System (GPS). The position determination will be used for the automatic detection of 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 Eurocard form factor device. In order to achieve long life span it should be installed into a hermetic enclosure.

Features

- Periodical reception of the GPS signals with the user-defined period
- During every receiving session 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 the 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 when receiving GPS signals	1.5mA 200mA
Deviation of coordinate 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 ±5ms
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
Data rate at the Abus	9600bps
Temperature range	-30°C to + 60°C (IEC 68-2-1, 2, 14)
Relative humidity	max. 90%, at the temperature +35°C (IEC 68-2-3)
Dimensions	100 x 70 x 20mm
Weight	300g

E931-20012302