

Radar sensor for measurements of velocity, acceleration and distance traveled for railway transport.

Technical information:

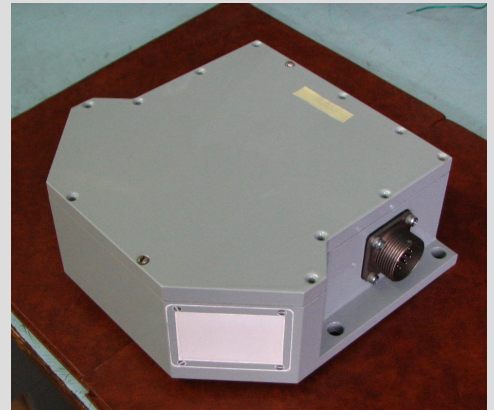
The sensor consists of:

- Microwave Unit;
- Display and Control Unit;
- Link cable.

Dimensions 175 x 190 x 70 mm³;
Weight no more than 4,5 kg;

Technical characteristics:

Operating frequency 59,6 GHz;
The range of measured velocity 2-350 km/h;
Measurement error velocity no more than 1,0%;
Measurement error distance traveled no more than 0,5%;
Measurement error acceleration no more than 1,0%;
Voltage 12V;
Power consumption no more than 20W.



Device description:

The sensor is mounted on the underside of the locomotive, and allows the measurements regardless of the motion direction.

Microwave Unit consists of the two antennas, transceiver, preprocessing module and the power supplies. On the output connector of the unit is formed an information signal, which determines the current value of speed in digital form.

Display and Control Unit performs the calculations of the current value of distance traveled, velocity and acceleration by a given algorithm, and displays the results of measurements in the form of text or graphical representation on the on-screen display. Mode control is done by push-button keypad.

Dimensions of the Display and Control Unit no more than 200 x 100 x 120 mm³,
Weight no more than 3 kg.

Performance options of the Display and Control Unit:

1. In the Display Unit will be used a black/white graphical LCD display. The measurement results are displayed as a text messages on the screen of a textual LCD display (4 lines of 20 characters).
2. The measurement results are displayed as text and graphical messages about the current values of the distance traveled, velocity, acceleration and time on the display screen.
3. In the Display Unit will be used a color liquid crystal display (industrial computer). The measurement results are displayed as text and graphical messages about the current values of the distance traveled, velocity, acceleration and time on the display screen. Special software allows entering of a route maps, comparing and correcting possible deviations from the optimal motion mode.