

Technical Information

E.I.S.Nr. TI-IR1-01 Issue date: March 26, 2014

Product name:

IR-Sensor

Description:

The IR-Sensor is the element to control the water supply at lavatories and detects the entry and exit of anyone from a defined area by supervising the change of infrared emission.

The reliability of the normal function of the IR-Sensor is secured up to 28° C. If the IR-Sensor notices someone inside the bathroom, the sensor sends a discrete signal immediately to the Water System Controller (WSC) to open the bathroom supply valves

Otherwise, if the IR-Sensor detects no-one in the bathroom the sensor resets the discrete signal. The WSC should close the bathroom supply valves depending on the signal of the IR-Sensor.

Operating Conditions

The IR-Sensor has been designed to be used within aircraft cabin and to meet RTCA DO-160D Operating Environment:

Temperature: $-15^{\circ}\text{C} \le T_{\text{ops}} \le 70^{\circ}\text{C}$

Altitude Pressure: 15.000 ft

Defined Area: diameter of 2m, if IR-Sensor is installed at a height of 2.5m. The IR-Sensor must be mounted according to mounting instructions issued by E.I.S. Electronics.

List of Equipment:

Name Part-No.

IR-Sensor 9632200-3001 Mod.B

General Layout:

Aluminium Housing with two interfaces for power supply and discrete signal output. The housing is designed in the way that only the lens with a diameter of max. 50 mm is visible from the bottom part of the ceiling. Four drillings in the housing bottom plate enable mounting of the IR-Sensor to the ceiling.

Power Supply:

Voltage: 28 VDC Power consumption: 200 mA I_{max}

Dimensions:

Length, width, height: 139.7 x 64 x 57.4 mm

Weight:

Approx. 0.3 kg

Material:

Housing: Aluminium and Plastic

PCB: FR4

