## S2000-SHIK Addressable Intrusion Detector

S2000-SHIK is an addressable surface optoelectronic intrusion detector used for registration of intrusion into the closed premises through door and window apertures, shop windows, corridors, stairs etc. It can be used for personnel notification of intrusion into dangerous technological zones or, for example, for warning of museum visitors on too close approaching to the exhibits. Alarm notification is transmitted via 2-wire communication line to the S2000-KDL controller. The device functions within the fire and intrusion alarm system ORION.

Main characteristics and functions:

- reliable intrusion detection: revealing of human moving with a speed 0,3 3,0 m/sec within the detection zone or while crossing its lateral border
- if a human is moving within the detection zone, the detector produces an ALARM notification in accordance with the assigned address
- separate communication line contacts: entry and output
- protection from external illumination by an optical filter
- power supply from the two-wire communication line S2000-KDL
- detection of breaking into the housing (box tamper) with TAMPER notification in accordance with the assigned address
- adjustment of a detection zone using a jointed holder
- indication function can be switched off
- up to 127 detectors can be connected to one S2000-KDL
- detector address can be assigned using a switch
- uninterrupted detector functioning round-the-clock
- time and amplitude signal processing in the detector
- interference immunity protects against false operating caused by small animals, illumination differences, convective air streams, slow changes of background temperature, voltage surges in power supply, electrostatic discharges, and electromagnetic fields of ultra-short wave-length band
- the S2000-SHIK detector produces no interferences for other similar detectors, detectors of other types and purposes, or household devices
- the detector is equipped with a red indicator to confirm serviceability, TAMPER button to indicate non-authorized penetration into the detector box, INDICATION connection for switching off light indicator, and a micro-switch for detector address assignment
- the indicator produces three types of notification -
  - NORM work in a usual regime
  - $\circ$  ALARM intrusion into the premises has been detected
  - TAMPER penetration into the detector box
- the detector preserves its serviceability under impact of sinusoidal vibration with acceleration 0,981 m/c<sup>2</sup> (0,1 g) within the frequency range 10-55 Hz

- the detector preserves its serviceability at power supply voltage fluctuations from 6,5 to 8,5 V
- the detector preserves its serviceability under the following conditions -
  - environment temperature from -30 to +50°C
  - $\circ~$  Max. air humidity 95 % at the temperature 25°C
- package detectors can sustain the following load
  - transportation jolting with acceleration 30 m/c<sup>2</sup> and frequency of 10-120 blows/minute or altogether 15,000 blows
  - environment temperature from -30 to +50°C
  - Max. air humidity 93±3 % at the temperature 35°C
- detector readiness time after transportation under conditions different from those prescribed for usage – max. than 6 hours;
- Mean TBF (time between failures) in standby mode: at least 60,000 hours

Technical specifications:

- max. detection distance (installation height): 5 m
- deviation angle from the installation surface: 7°
- deviation angle: 70°
- max. detection distance by horizontal installation: 7 m
- max. readiness time: 60 sec
- Max. current consumption in a standby or alarm mode with a light indicator on: 0,5 mA
- operating temperature range: -30 +50°C
- dimensions: 91x52x56 mm
- max. weight: 0,12 kg

A complete set includes:

- S2000-SHIK Intrusion Detector 1
- Screw 2
- Instruction 1
- Manual 1 for 10 detectors

Transportation and storage:

- detectors in factory package can be transported by all closed vehicles (trucks, railway cars, containers, pressurized heated aircraft compartments, holds etc)
- storage premises should be free from current-conducting dust, acid or alkaline fumes, as well as fumes causing corrosion or insulation damage
- detectors in the transport package should be stored up to 3 months; the transport package should be not dirty and without leakage traces
- for storage longer than 3 months detectors should be unpacked