



## K2150 long range motion sensor

Covered area is up to 3 000 square meters

Using as a humans, vehicles and other mechanisms presence detector in following systems:

- Smart manufacturing, Smart street and Smart city
- Indoor and outdoor lighting & security control systems
- Data-centers, petrol stations
- Warehouses with 3-30m height
- Adaptive traffic light control systems

Using as a tool of “machine vision” with an angle of 180 degrees and the range up to 80m

**Cost-effective technology with a short payback period**



## Smart Street and Smart City

Human and vehicle presence detection on the area up to 3000 square meters.



Street light control at parks, squares, sports grounds and car parkings near the shopping malls.



Pedestrian crossing control by occupancy - automatic lighting power change, control command transmission to traffic lights.

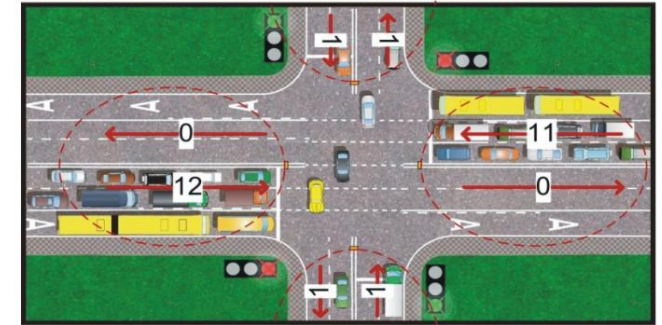


Underground crossing light and presence control

The sensor can be equipped with any communication modules for operation as part of Smart city systems, for example, LoRa, NB-LTE, Sigfox, Wi-Fi, RS-485

## Traffic density control

Human and vehicle presence detection on the area up to 3000 square meters.



The Sensor can count the quantity of transport passing through the crossroads in two directions separately – to the Sensor and from it. Then these data can be transferred to control systems of the following crossroads to optimize the traffic lights operation and reduce a jam probability

## Petrol station lighting & security control

Public petrol stations and unmanned petrol stations



- Automatic lighting control (autodimming) - energy saving up to 40%
- Security control, informing about incoming vehicles
- Reducing IP-cameras data traffic when no motion is detected
- Operating in all weather conditions, IP65
- Can be conceal behind any radio-transparent material

## Data center lighting & security control

One sensor controls up to 80 m alley and replaces 3-4 PIR sensors of the best worldwide manufacturers!



No one pays attention to the fact that even the best LEDs use only 20 % of the energy for light emission and **80 % for heat emission**. Therefore, in cooled rooms (Data centers, freezing warehouses) electric energy gets wasted twice – firstly on the air heating by fixtures, secondly on it's cooling by air conditioner.

Our sensors help to reduce these losses by 80%!

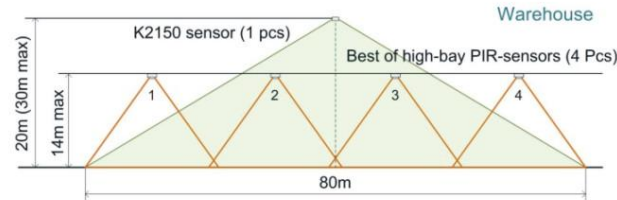
## Car parking lots lighting control



- Sensors sensitivity area is up to 3000 square meters
- Energy saving - up to 80%
- 1 year payback period
- One K2150 sensor replaces 8 ceiling PIR sensors
- Both underground and outdoor parking lots can be automated

## Warehouses lighting & security control

One sensor controls 80 m of warehouses alley and replaces 3-4 High-bay PIR sensors of the best worldwide manufacturers!



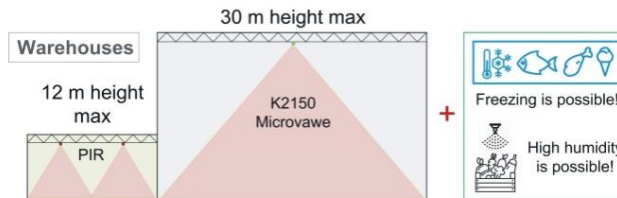
The range of the sensor does not depend on the height of the setting and make up about 80 m in length!

Energy saving is up to 80%, payback period is approximately 1 year!

**One sensor** reduces the CO2 emissions in atmosphere on **4 tones per year** and saves **up to 10 000 kW/hour electric power per year (24/7)**



K2150 is the only sensor that can operate in warehouses with the height **more than 12m** (from 3 to 30 m) and in **freezing warehouses!**



In high warehouses the power of lighting increases essentially, therefore implementation of "light for demand" principles can be extremely beneficial.

## Smart HVAC & Light system



Counting the number of staff in each room of office to optimize the operation of ventilation, air conditioning and lighting systems.

Reduces the cost of fresh air preparation (heating and cooling).

## About our company

Intelar LLC has been developing and manufacturing equipment for automatic lighting control and building automation since 2005.

Since November 2018 our company is a resident of the SKOLKOVO innovation center in Moscow.



Since July 2018 our long range motion sensor's solution has been awarded the Solar Impulse Efficient Solution Label, Switzerland. This solutions will be presented to governments, businesses and institutions to encourage them to adopt more ambitious environmental targets and energy policies.

In 2018 our company became a laureate of the national competition "Golden Mercury" in the nomination "The Best Small Enterprise in Russia in the Field of Innovation". The annual competition is held by the Chamber of Commerce and Industry of Russia.

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