### Parameters

#### Electrical parameters
- **Program name**: WS 5L Sensor (V1.0)
- **Model No.**: M/WS05.1-A
- **Working power**: 21~30VDC
- **BUS interface**: KNX/EIB
- **Dynamic current**: < 24mA
- **Static current**: < 20mA
- **Temperature detection range**: -30°C~70°C
- **Illumination detection range**: 0~15000LUX
- **Humidity detection range**: 20~95%RH
- **Microwave sensing range in diameter**: H:10m W:12m L:20m
- **KNX terminals**: (Red/Grey) 0.6 – 0.8mm Diameter Single-Core cable

#### Environmental Conditions
- **Working temperature**: -20°C~65°C
- **Working relative humidity**: Up to 90%
- **Storage temperature**: -20°C~65°C
- **Storage relative humidity**: Up to 93%

#### Approved
- CE, RoHS
- KNX

#### Product information
- **Dimensions**: 126×78×114(mm)
- **Net weight**: 360g
- **Housing Material**: ASA, stainless steel
- **Installation**: Screw fixation
- **IP rating**: IP56

### Important Notes
- **Special Programming** – This device is designed for professional KNX installation. It can only be programmed by ETS software.
- **Cable Connections** – Do not get wrong connection for Black and Red wires.
- **Voltage** – The input of voltage must be between 21-30VDC.
- **Mounting Location** – Outdoor.

### Installation Steps
- **KNX/EIB Cable Connection.**
- **Make sure the connection is right.**

### Overview

HDL-M/WS05.1-A KNX Outdoor Doppler Sensor includes 4 independent logic blocks and 1 combined logic block, the logic relation can be "AND" "OR", logic input conditions can be the condition of LUX sensor, microwave sensor, humidity sensor, temperature sensor, dry contact, external telegram.

### Functions
- **Built-in LUX sensor, microwave sensor, humidity sensor, temperature sensor, dry contact, external telegram.**
- **The multi-function motion sensor have 5 logic function blocks and can be set the logical relation AND/OR. Each with 10 output objects. The work mode include single mode and Master & Slave mode.**
- **The multi-function motion sensor can report movement status, Lux status to KNX system.**
- **The multi-function motion sensor supports constant brightness output.**
- **It can controls for Switch control, Absolute dimming control, Shutter control, Alarm control, Percentage control, Sequence control, Scene control, String(14 bytes) control, Threshold control, Logic combination.**
- **With function of constant brightness: keep the Lux in the constant value, will dim the lights to the corresponding intensity according to the surrounding brightness.**
- **The logic validity can be set by external telegram, enable end-user to enable or disable the preset telegrams.**

### Microwave sensing range

![Microwave sensing range diagram]
Safety Precautions

- Screw down torque is less than 0.4Nm.
- Do not get wrong connection on positive and negative for the bus cable.
- Do not connect the module to AC power.
- Do not let the module come into contact with hazardous liquids or corrosive gases.

Package Contents

- M/WS05.1-A *1
- Datasheet *1