# DL<sup>®</sup> KNX<sup>®</sup> Datasheet HDL-KNX/EIB M/HS05.1-D PIR and Lux Sensor

# **Parameters**

Electrical Parameters			
Working Voltage	21~30VDC		
Communication	KNX/EIB		
Dynamic Current	< 20mA		
Static current	< 5mA		
KNX terminals	KNX Bus Terminal - (Red /Grey) 0.6 – 0.8mm Single-Core Cable		
PIR Sensing range in diameter	8m (install height-2.5m)		
Environmental Conditions			
Working temperature	-5°C~45°C		
Working relative Humidity	Up to 90%		
Storage temperature	-20°C~+60°C		
Storage relative humidity	Up to 93%		
Approved			
CE, RoHS			
KNX			

#### Product information

Housing material	ABS, PC	
Dimensions	Ф84mm×42.6mm	
Net weight	50g	
Installation	Indoor Installation	
Protection rating	IP 20	

# **Important Notes**

- Special Programming HDL-KNX/EIB M/HS05.1-D PIR and Lux Sensor is designed for professional KNX installation. It only can be programmed by ETS software.
- Cable Connections Ensure making correct connections for Black and Red wires.
- Mounting Location Installed indoors, to avoid installation near the air-conditioner vent, and be away from the heat source.
- Bus Voltage Ensure the input voltage should be 21-30VDC.

### **Installation Steps**

- Label and pay particular attentions to different cables, AC power cable, KNX Bus cable, and load cable;
- Installation position: Indoor installation;
- Connect to power supply and load device;
- Ensure the KNX Bus cable is connected compliant with the specific Bus cable connection method;
- Make sure all cables connections are correct;
- Tidy all cables, separate the KNX Bus cable and power cable.

#### **Overview**



HDL-KNX/EIB M/HS05.1-D PIR and Lux Sensor is a multifunctional movement sensor. It includes 4 independent logic blocks and 1 combined logic block. The logic relations "AND", "OR" can be set. The logic input conditions contain the conditions of movement sensor, LUX, temperature, dry contact and external conditions. According to different application requirements, the sensor can be configured as the master-slave mode or single mode.

#### **Functions**

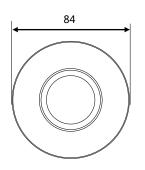
- The HDL-KNX/EIB M/HS05.1-D PIR and Lux Sensor supports movement detection, temperature detection, LUX detection, dry contact detection and external telegram detection.
- Supports 2 channels of light control, it can control the switch and dimming output. When the dimming function is applied, 4 brightness values can be set, and after 4 times delay, the brightness of the setting can be reached.
- The HDL-KNX/EIB M/HS05.1-D PIR and Lux Sensor have 5 logic function blocks and can be set the logical relation AND/OR. Each block can control ten output objects. The work mode includes single mode and Master & Slave mode.
- The HDL-KNX/EIB M/HS05.1-D PIR and Lux Sensor can report movement status, temperature, Lux or dry contact status to KNX system.
- The sensing range for detecting people sitting and walk-ing are different sizes. The recommended installation height is 2 m - 3m. The PIR sensing rang of the detector increases as the installation height increases.
- The sensor supports object controls: Switch control, Absolute dimming control, Shutter control, Alarm control, Percentage control, Sequence control, Scene control, String control, Threshold control, Logic combination control.
- Supports dry contact input.
- With the function of constant brightness: The sensor keeps the Lux at a constant value, and it will dim the lights to the corresponding intensity according to the surrounding brightness.

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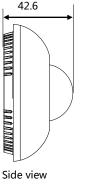
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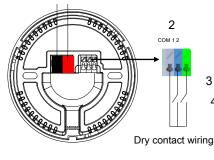
# Dimensions and Wiring (Unit: mm)

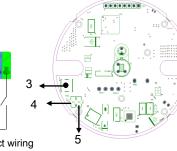


Front view







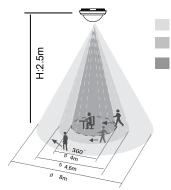




2 Dry contact 1, Dry contact 2

Back view

- Programming button 3
- Programming LED indicator(VE1): For indicating 4 normal mode (LED Off) or addressing mode (LED On); it is automatically Off once the physical address has been transferred.
- 5. Working LED (VE2): For indicating working mode (LED On) or idle mode (LED Off)



#### Walking across

Walking across with small steps

Anti-creep, seated activity slight movements and walking towards

#### **PIR Sensing range**

Mounting height	Seated activity and walking towards	Walking across with small steps	Walking across
2.5m	4m	4.6m	8m
3m	5m	4.6m	8m
4m	4m	7m	10m
5m	4m	8m	10m

# Safety Precautions

- The tightening torque shall not exceed 0.2Nm.
- Ensure making correct connections to the positive and negative poles of the Bus cable.
- Do not connect AC voltage to Bus wire, or it will damage all of devices in the system.
- Avoid contact with liquids and corrosive gases.
- Ensure good ventilation.

# Package Contents

Datasheet\*1 / HDL-KNX/EIB M/HS05.1-D \*1

