

SM (SENSOR MODULE)

Product Overview

SM (Sensor Module) is a device that controls the lighting control system by receiving the input of the illuminance sensor, occupancy sensor, and DI -2 point connected to the data line at the bottom of the ELC communication network.

Basic Relay On/Off control is possible by the illuminance and occupancy sensor through one SM, but it is also a product that can be dimmed by DALI system.



APPLICATIONS

- SM is a product that is installed in the lighting control panel and enable interlocking control by sensors.
- It is a sensor module applicable to the ELC communication network.
- The lighting control panel or DALI system is controlled according to the operation of the photo sensor and the occupancy sensor.
- By using two digital inputs (Dis), interlocking control is also possible by connecting the contact point for firefighting or crime prevention functions.
- SM collects the input information by the sensor and operates the lower lighting control panel through the data line.



Major Feature

- Sensor Modul connected to ETLN Network
- Occupancy sensor connection
- Photo sensor connection
- DI-2Point connection
- 1 ~ 999 Address setting (connecting 999 sensor modules to one SCU)
- Enable & Disable selection function for operation
- Internal time setting function for sensor

Control Function

- LED luminaire On/Off & Dimming interlock control
- Rely On/Off interlock control
- Photo sensor interlock control
- Storing group and scene information using non-volatile memory
- Address setting : 000 ~ 999
- Group and interlock control

SPECIFICATIONS

1. HARDWARE Function & Structure

- Communication : ETLC NETWORK
- MCU : 32bit Arm Processor(coreTex -M3) series
- Installation : Installation inside the lighting control panel
- Photo sensor input : 1 EA.
- Occupancy sensor input : 1 EA.
- DI (Digital Input): 2EA

2. Power Supply

- Input Voltage : 12 - 24 VDC
- Operation Voltage : DC5V, 3.3V
- Current consumption/Power : 3mA / 72 mW

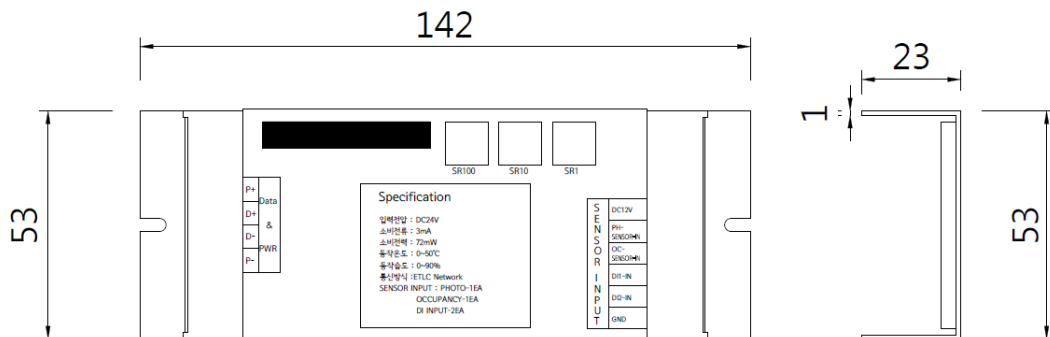
3. Setting

- Address Setting : 000~999

4. Operation Environment

- Operation Condition : 0 ~ 60 °C 0~90 RH

DIMENSION



CELL LIGHTING CONTROLS SYSTEMS

The diagram illustrates the wiring for the ELC Multi Sensor Module. It includes a Power Supply unit, a SCU (Slave Control Unit), and two sensors labeled OS and PH.

- Power Supply:** Labeled "POWER SUPPLY". It has a "POWER" terminal and a "GND" terminal. Wires connect it to the "Data" and "E" terminals of the ELC Multi Sensor Module.
- SCU (Slave Control Unit):** Labeled "FROM : SCU". It provides power to the module via its "VCC" and "GND" terminals.
- ELC MULTI SENSOR MODULE:** The central component. Its specifications are listed below:

Specification	
VIN(V)	DC5V
IIN(A)	≤0.1A
VOUT(V)	5V
IOUT(A)	≤0.1A
IO(Ω)	≤1kΩ
WORKING TEMPERATURE(°C)	-40~85
STORAGE TEMPERATURE(°C)	-40~125
RELATIVE HUMIDITY(%)	10~90
SHOCK RESISTANCE(M/S²)	10~100
- Sensors:**
 - OS (Oxygen Sensor):** A three-wire sensor connected to the module's "RED(Power)", "BROWN/WHITE(BLACK(Power))", and "GREEN" wires.
 - PH (pH Sensor):** A two-wire sensor connected to the module's "RED" and "BLACK" wires.