CWT-SLS Light sensor (analog output type) Manual

The transmitter is an optical precision photosensitive transmitter, and the output value unit of measurement is Lux, The use of wall-mounted waterproof housing, wall-mounted installation, high level of protection. 4-20ma/0-10v/0-5v A variety of analog output signal optional, product power supply for 10-30V wide voltage power supply, mainly used in agricultural greenhouses, flower culture greenhouse, Agricultural field, electronic equipment production lines, such as the need for illumination monitoring occasions.

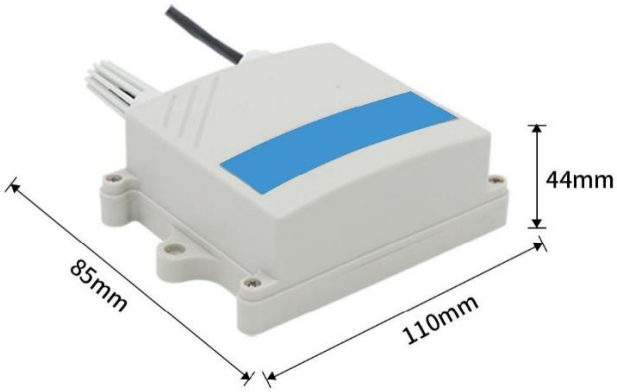
Features

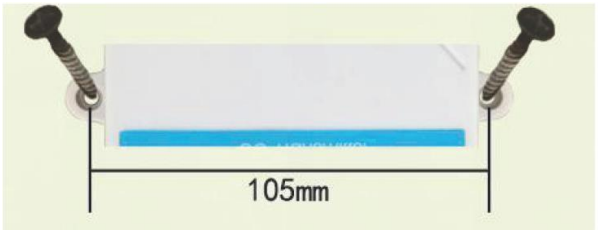
- measuring range of high precision illumination measurement 0-6 million Lux, 0-20 million Lux Optional.
- 4-20ma/0-10v/0-5v multiple analog output signals optional
- wall-mounted waterproof shell, high protection level, can be used for outdoor or harsh on-site environment
- 10-30V DC wide voltage power supply

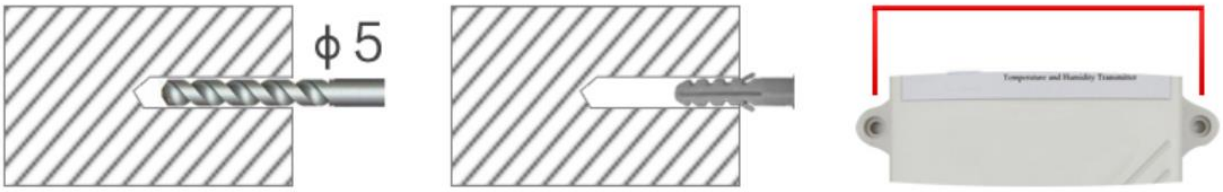
Specification

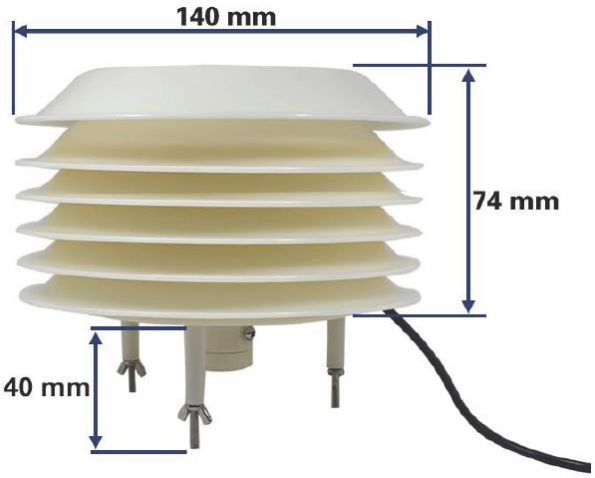
DC power Supply (default)	10-30vdc (0~10v type need DC 24V power supply)	
Maximum power consumption	Current output	1.2W
	Voltage output	1.2W
Precision	Light intensity	±7% (°)
Light intensity Range	0~200000 Lux is optional, default is 0~65535 Lux	
Working environment	-40 C° ~+60 C°, 0%RH~80%RH	
Long-term stability	Light intensity	≤ 5%/y
Response time	Light intensity	0.1s
Output signal	Current output	4ma~20ma
	Voltage output	0~5v/0~10v
Load capacity	Voltage output	output resistor ≤ 250Ω
	Current output	≤ 600Ω

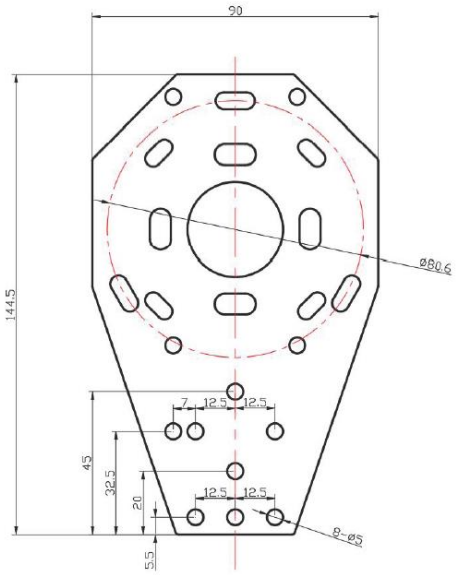
Size and installation







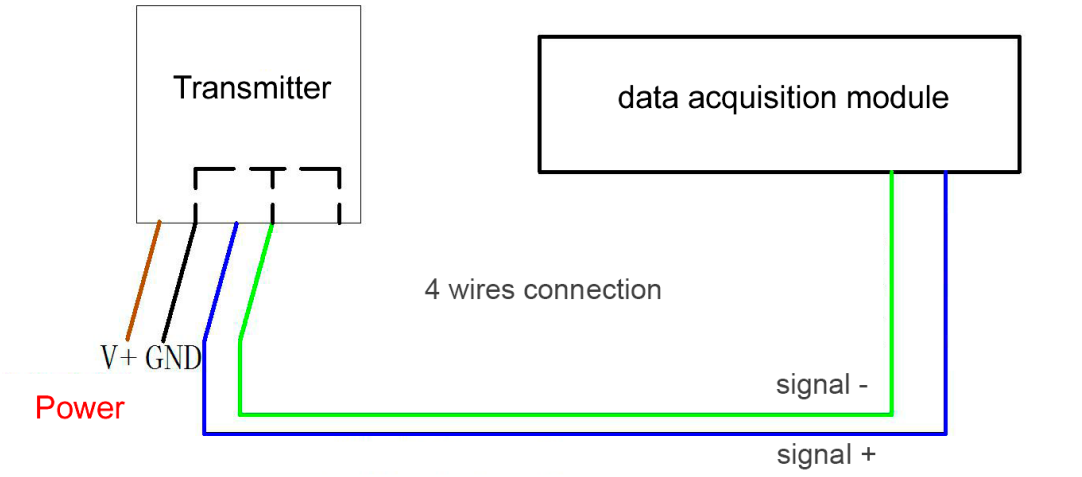


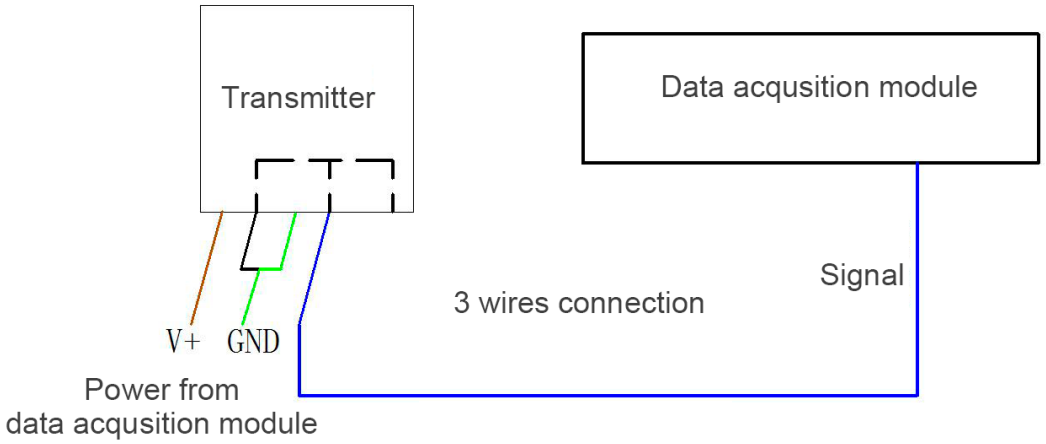


Wiring

Cable color	description
Brown	Power + (DC10-30V)
black	Power -
Blue	Singal output +
Green	Singal output -

Connection diagram





Calculation

Current (4-20mA) output type:

measuring value=((LUXmax-LUXmin)/16)*(output value-4)

for example, transmitter measuring range: 0-200000LUX
output value is 12mA.
measuring value=((200000-0)/16)*(12-4)= 100000LUX

voltage (0-5V/0-10V) output type:

measuring value=((LUXmax-LUXmin)/(Vmax-Vmin))*output value

for example, transmitter measuring range: 0-65535 LUX
voltage type: 0-10V
output value is 5V.
measuring value=((65535-0)/(10-0))*5 = 32767.5 LUX