WiRIO Industrial Wireless Counter and I/O Adapter

Model : CM120-C02

Feature

Sensor and Sensor Port

- One Sensing Input based on Infrared Proximity Sensor.
- High sensitivity, reliability and excellent long-term stability.
- Adjustable detection distance from 3cm to 80cm.
- Sensor output direct connect to the sensor port without any external component.
- No extra external power required for the sensor device.

Output Port

- One output channel capable to drive up to 1A.
- Direct control by customer backend server.
- NPN output type.
- Able to direct connect to a 5-24V relay for driving higher voltage/current devices.

Input Power Supply

- Width input power supply voltage range from 9V to 24V DC.
- Build in DC/DC adapter to reduce power lost during power regulation.
- Terminal block connector and DC Jack for easy installation.

Server Connectivity

- Support WiFi 2.4G 802.11 b/g/n and WPA/WPA2.
- Transmission power up to 16dBm±2 dBm.
- Receive sensitivities up to -90dBm.
- Build in internal antennal for easy installation.
- All communication with server is fully encrypted with AES-128

Sensor Supply Output

- 5V Supply provided for sensor power supply requirement.
- Able to drive up to 5V 1A.

Easy Integration with User Backend System

- WiRIO Management Server (WMS) is provided for easy management of multiple WiRIO devices.
- Back End System only need to communicate with WMS to control and received information from WiRIO devices.
- Communication with WMS is based on JSON string.
- WMS server will be provided in multiple setup,
    - Standalone execution JAVA file for Windows and Linux
    - Docker container
- Detail installation information can be obtain from Github server at https://github.com/Easyiot-Wirio/Wirio/wiki

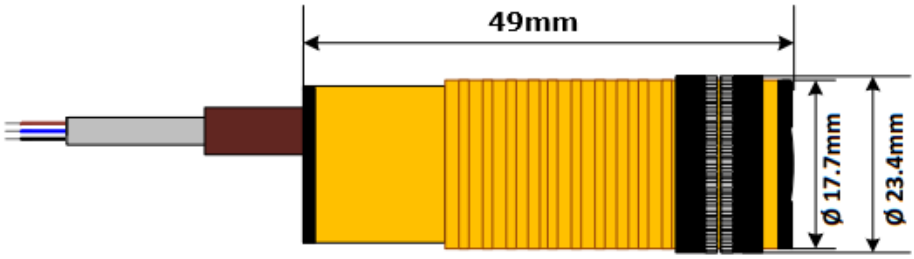

Figure 1 Proximity Sensor Dimension

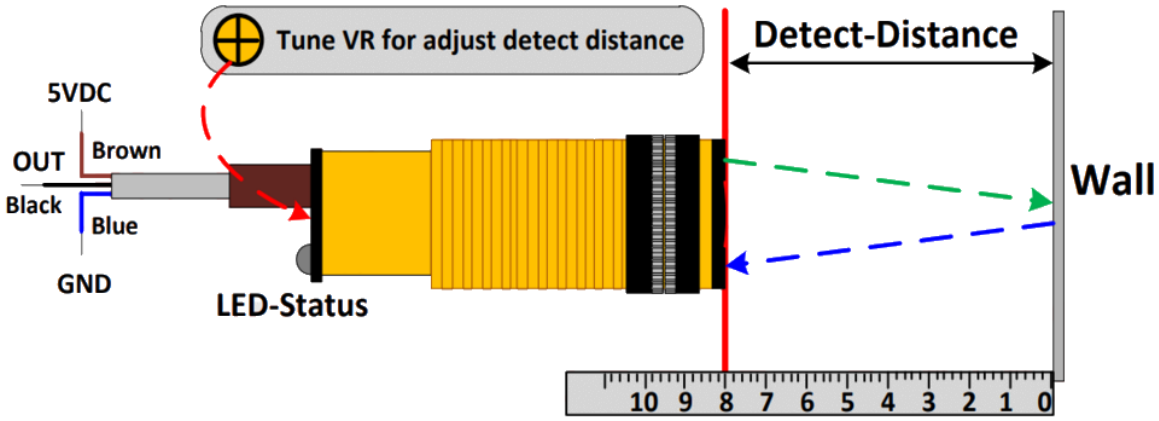

Figure 2 Sensor Detection Range Adjustment

Infrared Proximity Sensor	
Sensing Distance	3cm to 80cm Adjustable
Output Type	NPN Type, Pull to GND when object detected
Supply Input	5Vdc
Operating Current	100mA

Output Port

Output Type	NPN Type, Pull to GND When Turn On
Max Current	1A
Max Voltage	24Vdc
Other	Able to direct connect to a 5-24V Relay for driver higher Voltage/Current devices.

WiFi Linkage

Frequency Range	2412-2484Mhz
Antenna Type	PCB
Transmit Power	802.11b: 16±2 dBm (@11Mbps) 802.11g: 14±2 dBm (@54Mbps) 802.11g: 13±2 dBm (@HT20, MCS7)
Receiving Sensitivity	CCK, 1Mbps: -90dBm CCK, 11Mbps: -85dBm 6Mbps(1/2 BPSK): -88dBm 54Mbps (3/4 64-QAM): -70dBm HT20, MCS7 (65Mbps, 72.2Mbps):-67dBm
Security	WEP/WPA-PSK/WPA2-PSK

System Power

Input Voltage	9V to 24V DC
Current Usage	250mA @ 12V, 125mA @ 24V
Output Supply Port	5V @ 1A Max or According to Input voltage @ 1A Max

Environment

Operating Temperature	0°C to 70°C
Storage Temperature	-40°C to 85°C, <90%RH

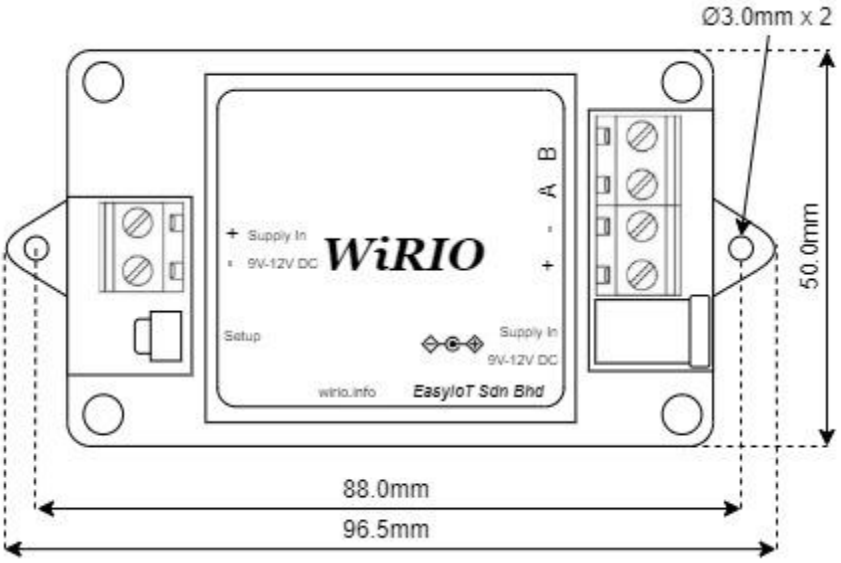

Figure 3 CM-120 Dimension (Top View)

Figure 4 CM-120 Dimension (Side View)