

KEM1501

Intelligent Virtual Fence APP Kit

(Designed to work with Microsoft IoT Central)



Introduction

Traditional manufacturing has always had a threshold for cloud solutions, so that it cannot be popularized, which is due to the high price and complicated cloud software compilation. SUNIX using innovative EAZInet technology and Microsoft's latest SaaS platform to create a dedicated cloud based of Azure IoT Central. Customers can match suitable application packages for different fields, and can complete the development of equipment requirements within a few hours. No need to intrude into the equipment, no need programming experience. It's completed with just few steps.



Features

- All-in-one IoT Kit for Rapid Deployment
- Code-free, No Programming
- Easy to use, Setup in Hours
- Simple IoT Kit for Non-developers

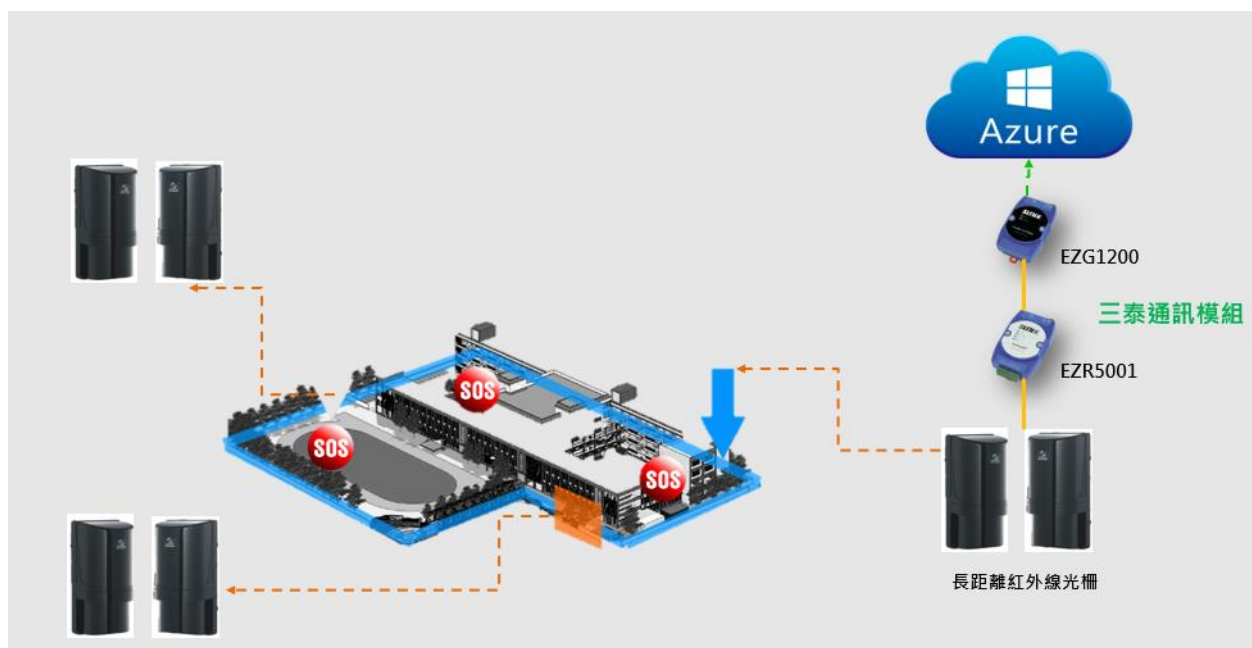
Application Scenario

Long Distance Infrared Electric Fence:

The traditional fence was become a blind spot!

The Long Distance Infrared Electric Fence can be matched with an open space plan, and an intrusion alarm is issued immediately

Stay detection: If someone stays, you can use the IoT Central alarm service, including mail/SMS that can be notified immediately.



Devices List:

■ Communication Layer:

EZG1200 (Azure IoT Central GW)

EZR5001 (Digital I/O)

■ Device Layer:

2PB-60AD-IOT , Infrared Sensor (Digital)

Common Specifications for Communication Layer Devices

LAN

Ethernet: 2-port 10/100 Mbps RJ45 ports

Protection: 1.5 KV magnetic isolation

Protocols: SUNIX EAZInet

Physical Characteristics

Dimensions: 72.1 x 108 x 33.7 mm

(2.83 x 4.25 x 1.32 in)

Weight: 118 g

Mounting: DIN rail or wall

Environmental Limits

Operating Temperature:

-25 to 70°C (-13 to 158°F)

Storage Temperature:

-30 to 75°C (-22 to 167°F)

Operation Humidity:

5 to 95% (non-condensing)

Standards and Certifications

- **EMC:** EN 55032, EN 55035
- **EMI:** FCC Part 15B Class B
- **EMS:** IEC 61000-4-2
- **ESD:** Contact: 4 kV; Air: 8 kV

EZG1200 Azure IoT Central Gateway Specifications

It is designed to work with Microsoft Azure IoT Central. The customer leverage SUNIX communication protocol for establishing direct connections with Azure IoT cloud.



EZR5001 4-ch DI / 2-ch DO Specifications

Digital Input

Channels: 4 channels

Dry Contact:

- Logic Level 0: Open
- Logic Level 1: Close to GND

Wet Contact:

- Logic Level 0: 3V (Max.)
- Logic Level 1: 10 to 50V

Input Resistance: 10 k Ω

Isolation: 1k VDC

Over-Voltage Protection: 70VDC

Digital Output

Channels: 2 channels

Output Type: NPN

Output Voltage Range: 3.5-30V

Normal Output Current: 500mA per Channel

Isolation: 1k VDC

Startup Value Setting: Yes

Communication Safety Value Setting: Yes

Power Requirements

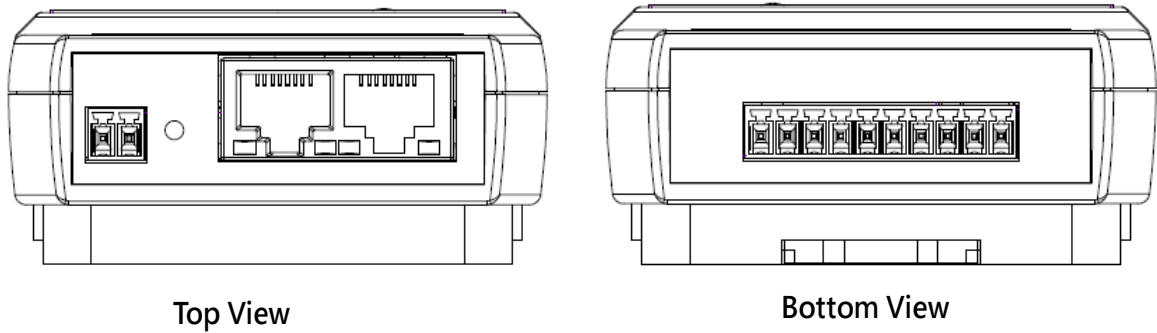
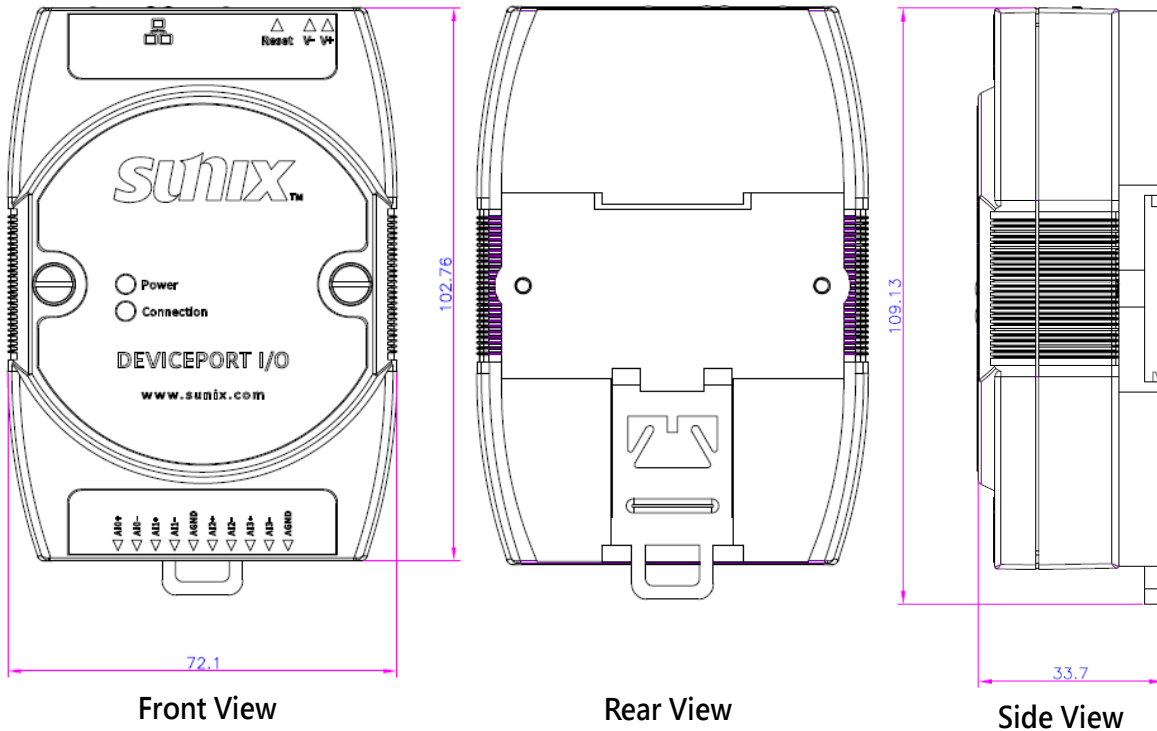
Input Voltage: 12 to 24 VDC

Power Consumption: 1.6W @ 24 VDC

Connector: 2 PIN Terminal Block

Dimensions

72.1 x 108 x 33.7 mm (2.83 x 4.25 x 1.32 in)



2PB-60AD-IOT Infrared Sensor (Digital) Specifications

Detection Distance - Outdoor	200 ft. (60m)
Detection Distance - Indoor	400 ft. (120m)
Max. Arrival Distance	600 公尺
Current Consumption	85mA
Selectable Beam Frequency	4-channel
Power Supply	10.5V ~ 30VDC (Non_Polarity)
Infrared Photoelectric	LED pulsed beam, Double modulation
Detection System	Simultaneous breaking of 2 beams
Response Time	50msec ~ 700msec (Adjustable)
Alarm Output	Dry connect relay NC./ NO. 0.2A / 28VDC Contact action: 1 To 3 sec .
Tamper Output	Dry connect relay NC. 0.2A / 28VDC Action : cover is detached.
Alarm LED	Red LED (Receiver) lights when an alarm is initiated.
Attenuation LED	Yellow LED (Receiver) lights when beam is attenuated
Functions	Anti-environmental interference 、 A.G.C.(Automatic Gain Control)Circuit
Alignment Angle	Horizontal $\pm 90^\circ$, Vertical $\pm 5^\circ$
Operating Temperature	-13°F to +131°F (-25°C to +55°C)
Mounting Positions	Indoor / Outdoor
Wiring	Terminals
Weight	32.7oz (925g) Transmitter & Receiver
Dimensions	W76 x H181.5 x D77.8 mm
Standard Accessories	U-Shaped Brackets x 2 , Attenuation Sheet x 1 Screws (4x20 Self tapping) x 4 , Screws (M4 x 20) x 4

Packing Contents

- EZG1200 - Azure IoT Central Gateway x1
- EZR5001 - 4-ch Digital Input / 2-ch Digital Output Ethernet IO Controller x1
- 2PB-60AD-IOT Infrared Sensor x1

Ordering Information

- KEM1501 - Intelligent Virtual Fence APP Kit