Industries IoT Devices

May 2023 (Semi-Con)

MXPAC SDN BHD (2010) is an established business with Industry 4.0 experience, partnered with reputable and trustworthy business partners such as HIWIN Robotic System (Taiwan), Datalogic (Barcode & Imaging Solution), EVT (RFID & BLE System Integration & customize circuits design), REVO (Feeder Bowl) and UR Robotic System (Denmark) to ensure you have the best support and solution.

As we are moving in the era of Industry 4.0, all components, devices and system are expected to be faster and smarter with strong data management, analytics, reports and dashboards for real time support and decision making. YIELD and QUALITY are keys in ensuring your company continue to provide value to your customers and stay competitive.

Our Expertise

Design & Production Team
- Mechanical Design: 2D & 3D modelling

Electrical
- Wiring & Control instruments
- Flex-circuits integration & I/O Module design.

Assembly & System Setup
- Part assembly & System Integration debugging

Software
- Programming – PC Based & PLC
- Robot System Integration Partner **(KUKA, UR ROBOT, HIWIN, FANUC)**
- **Vision Inspection System** – 2D & 3D (capable to handle different product aspects & customize requirement)
- **Datalogic, Keyence, Cognex, IFM, TT Vision, TMS**
- Warehousing Management System
- **RFID, Wi-Fi IO Controller, Bar Code** system integration solutions
- Sub module Tester Programming & Fixtures
- Laser Marking Solution

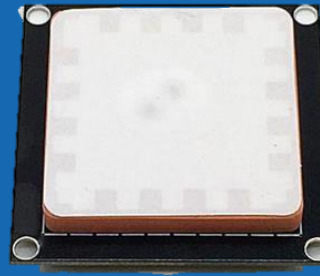*YOUR BUSINESS AUTOMATION SOLUTIONS PROVIDER*

About Us

ABOUT US

Your Business Automation Solution Provider

MXPAC SDN BHD (2010) is an established business with Industry 4.0 experience, partnered with reputable and trustworthy business.

With more than a decade of industrial automation experience, we would like to partner with you to grow and scale our business together.

Get in touch with us today to learn more about our solutions.

EV EANT4050-3
RFID ANTHENNA READER

EV EANT-PNL-6
RFID ANTHENNA READER

EV ESANT-4141-3
RFID ANTHENNA READER

EV TU-04-C04
RFID ANTHENNA READER

ABOUT OUR RFID

4 Channel Long Range UHF Tag Reading which can match with various types of Antenna to manage the tag detection range and angle

Open Standard Protocol and readily available either using paid version of free version of MQTT Server

OUR MULTIPLE ARRAY OF TAGS

EV E3RF-RT2
ANTI-HUMAN BODY TAG

EV E3RF-RT2
ANTI-HUMAN BODY TAG

EV ET-K4836
HIGH TEMP ANTI METAL TAG

EV ET-FH7515
LAUNDRY CLOTHING TAG

EV-TAG6826
STANDARD STICKER TAG

Partner with Us

54, Jalan Iks Bukit Tengah Taman Iks Bkt Tengah 14000 Bukit Mertajam Pulau Pinang Malaysia

+60 13-368 7224

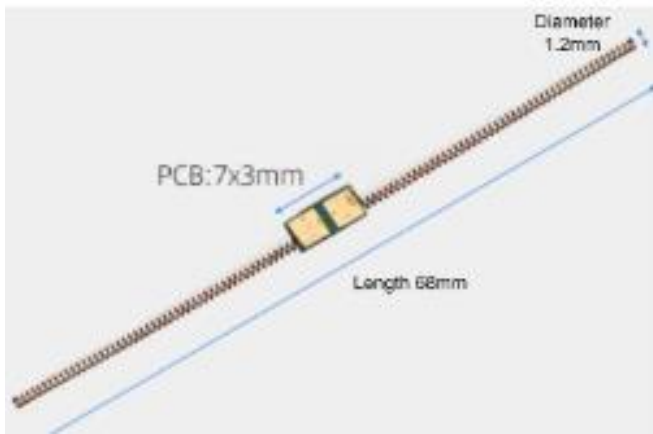mxpacgroup.com

Tyres RFID Tag

System Features

ET-TH68.

Protocol	ISO18000-6C
Operating Frequency	865-868Mhz, 902-928Mhz, 920-925Mhz
Reading distance (2W ERP)*	5m
Tag Chip	Impinj Monza 4QT
Storage	EPC 128bit
Dimension	68mm, PCB: 7mm x 3mm
Material	PCB+Brass Alloy
Operation Temp.	-20°C~100°C
Storage Temp.	-30°C~120°C

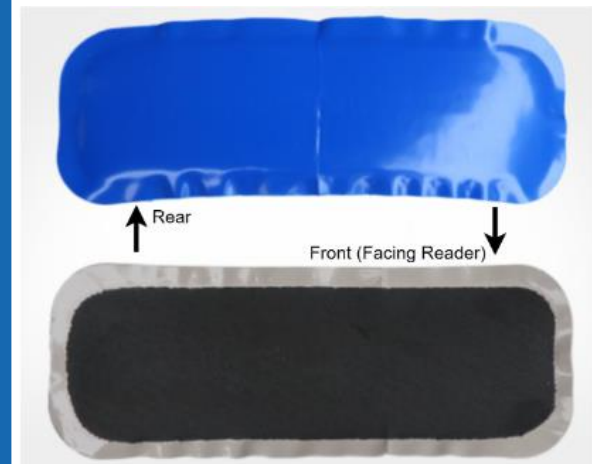*Easy Installation and Setup*

Best tool for your tires asset management and traceability

Met Industrial standard and protocol

ET-LT1213185.

Protocol	ISO18000-6C
Operating Frequency	865-868Mhz, 902-928Mhz, 920-925Mhz
Reading distance (2W ERP)*	5m
Tag Chip	Impinj Monza 4QT
Storage	EPC 128bit
Dimension	95mm * 35mm * 3mm
Material	PCB+Brass Alloy+Rubber
Operation Temp.	-20°C~100°C
Storage Temp.	-30°C~120°C

1. Clean the surface

2. Sand the surface to provide a smooth area

3. Use rubber tire glue to stick the tag

4. Allow 5~10 minute for the glue to cure properly

Industrial IOT Environment Sensor

EVS-101

Temperature, Humidity and Room Pressure Sensor Logging.

System Features

- WIFI/Ethernet Connected Industrial IOT Devices

- Network link with MQTT Broker Server

- Direct link with USB Connection

- Device's sensor with Micro electromechanically systems sensor (MEMS)

- Thin Film Transistor (TFT) Display

- Auto fetch Realtime clock from Internet Time Server

- Easy Setup & Configuration

Power and Enclosure Specification

Input Voltage	DC 5V USB-C Connector
System Power Consumption	5W Max
Operation Humidity	10%-95%RH
Operation Temperature	25°C to 85°C
Storage Humidity	10%-95%RH
Storage Temperature	0°C to 85°C
Enclosure Dimension	59mm (W) x 88mm (L) x 37mm (H) (Exclude sensor wire and mounting hook, 109mm(L) with mounting hook)
Enclosure Type	Durable Industrial ABS and Acrylic Casing

Sensors Specification

Temperature and Humidity Sensor	Model SHT-40 By Sensirion
Temperature Accuracy	Up to ±0.1°C
Relative Humidity Accuracy	Up to ±1.5%RH
Operating Range	0~100%RH, -40~125°C
Pressure Sensor	Model BMP280 By Bosch Sensortech
Pressure Absolute Accuracy	±1mBar @950mBar~1050mBar, 0°C ~40°C
Operating Range	300mBar~1100mBar

Wi-Fi Specification

Frequency	2.4Ghz~2.5Ghz
Supported Wi-Fi Protocol	802.11 b/g/n
Antenna Type	Internal
Security Protocol	WPA/WPA2 personal, WPA/WPA2 Enterprise
Encryption Protocol	WEP/TKIP/AES

Ethernet Specification

Speed	RJ45, 10/100 Mbps

USB Type-C Port Specification

Supported Protocol	USB Virtual Comm Port
Baudrate	115200 Baud, 8bit, no-parity, 1 stop bit

Backend Server Connectivity

Server Connection	MQTT Broker with TCP, TCP-TLS, Web-Socket Connection
Server Port	User Definable
Encryption/Security	Public CA, Self-Signed Certificate
Messaging Format	JSON
Other	NTP auto RTC update

Industrial IOT Odor Sensor

EVS-201

Temperature, Humidity and Gas Sensor NH3 and H2S.

System Features

- WIFI/Ethernet Connected Industrial IOT Devices

- Network link with MQTT Broker Server

- Direct link with USB Connection

- Device's sensor with Micro electromechanically systems sensor (MEMS)

- Thin Film Transistor (TFT) Display

- Auto fetch Realtime clock from Internet Time Server

- Easy Setup & Configuration

Sensors Specification

Temperature and Humidity Sensor	Model SHT-Cx By Sensirion
Temperature Accuracy	±1°C
Relative Humidity Accuracy	2.5%RH
Operating Range	0~100%RH, -40~125°C

Gas Sensors Specification

NH3 and H2S Gas Sensor	Electrochemical Gas Sensor fully calibrated by sensor manufacture
Resolution	1ppm
Range	NH3: 0~50PPM, H2S: 0~5000PPM
Operating Range	15~90%RH, -20~50°C
Initial Start-up Setup Period	Less than 3min
Response Period	Less than 30 second
Recovery Period	Less than 60 second

Wi-Fi Specification

Frequency	2.4Ghz~2.5Ghz
Supported Wi-Fi Protocol	802.11 b/g/n
Antenna Type	Internal
Security Protocol	WPA/WPA2 personal, WPA/WPA2 Enterprise
Encryption Protocol	WEP/TKIP/AES

Ethernet Specification

Speed	RJ45, 10/100 Mbps

USB Type-C Port Specification

Supported Protocol	USB Virtual Comm Port
Baudrate	115200 Baud, 8bit, no-parity, 1 stop bit

Backend Server Connectivity

Server Connection	MQTT Broker with TCP, TCP-TLS, Web-Socket Connection
Server Port	User Definable
Encryption/Security	Public CA, Self-Signed Certificate
Messaging Format	JSON
Other	NTP auto RTC update

Power and Enclosure Specification

Input Voltage	DC 5V through USB-C Connector
System Power Consumption	5W Max
Operation Humidity	10%-95%RH
Operation Temperature	25°C to 85°C
Storage Humidity	10%-95%RH
Storage Temperature	0°C to 85°C
Enclosure Dimension	68mm (W) x 100mm (L) x 43mm (H) (Exclude sensor wire and mounting hook, 125mm(L) with mounting hook)
Enclosure Type	Durable Industrial ABS and Acrylic Casing with build in ventilation fan

Industrial IOT Remote I/O Controller

RP-01-0808

WIFI/Ethernet Remote I/O Controller

System Features

WIFI/Ethernet Connected Remote I/O Controller

Network link with MQTT Broker Server

Direct link with USB Connection

Build in with onboard Input and output Port

Auto fetch Realtime clock from Internet Time Server

FW-Bus for I/O port expansion

Easy Setup & Configuration

System Specification

Input Voltage	DC 12V to 24V or POE
System Power Consumption	5W Max
Spare 12V Power Consumption	5W Max
Operation Humidity	20%-90%RH
Operation Temperature	25°C to 45°C
Storage Humidity	10-95RH
Storage Temperature	0°C to 85°C
Enclosure Dimension	68mm (W) x 100mm (L) x 40mm (H) with 2x mounting screw hole.
Enclosure Type	ABS
Ethernet	100Base-T RJ45

Wi-Fi Specification

Frequency	2.4Ghz~2.5Ghz
Tx Output Power	Up to +20dBm on 11b mode
Rx Sensitivity	Up to -91dBm on 11Mbps
Supported Wi-Fi Protocol	802.11 b/g/n
Supported Security Protocol	WPA/WPA2 personal, WPA Enterprise
Supported Encryption Protocol	WEP/TKIP/AES
Antenna Type	Internal PCB Antenna
Server Connection	MQTT with TCP
Server Port	User Define
Messaging Base Format	JSON

Output Specification

Output Port	8 Channel
Connection Type	N Type Sink to Ground when on
Max V+ Voltage	30V
Max Sink Current	1A

Input Port Specification

Input Port	8 Channel
Connection Type	N Type, External Sink to Ground to Trigger On
Max Sink Current	5mA

Industrial IOT Remote I/O Extension

RE-01-0808

Remote I/O Extension

System Features

FW-Bus Client

Internal Power Supply with DC/DC Convertor to reduce power wastage

Direct link with USB Connection

Onboard Input and Output Port

Easy Setup & Configuration

System Specification

Input Voltage	DC 12V to 24V or POE
System Power Consumption	5W Max
Operation Humidity	20%-90%RH
Operation Temperature	25°C to 45°C
Storage Humidity	10-95RH
Storage Temperature	0°C to 85°C
Enclosure Dimension	68mm (W) x 100mm (L) x 40mm (H) with 2x mounting screw hole.
Enclosure Type	ABS
Max Unit Allow on the bus	8

Input Port Specification

Input Port	8 Channel
Connection Type	N Type, External Sink to Ground to Trigger On
Max Sink Current	5mA

Output Specification

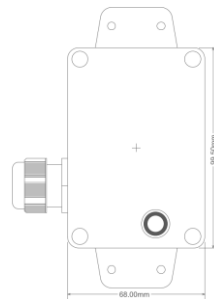|	
Output Port	8 Channel
Connection Type	N Type Sink to Ground when on
Max V+ Voltage	30V
Max Sink Current	1A

Industrial IOT Remote I/O Controller

RP-1204

With 12 Channel Isolated Input and 4 Channel Dry Contact Output

System Features

- WIFI Connected Remote I/O Controller
- Network link with MQTT Broker Server
- Opto-Isolated Input Port
- Relay Dry Contact Output
- Auto fetch Realtime clock from Internet Time Server
- Easy Setup & Configuration

Power and Enclosure Specification

Input Voltage	DC 12V to 24V Terminal Block Connector
System Power Consumption	5W Max
Operation Humidity	10%-95%RH
Operation Temperature	25°C to 55°C
Storage Humidity	10%-95%RH
Storage Temperature	0°C to 85°C
Enclosure Dimension	68mm (W) x 99.5mm (L) x 50mm (H) (Exclude Wire Glands Outlet)
Enclosure Type	Water/Dust resistance Durable Industrial PPM

Input Channel

Total Channel	12
Input Type	Bi-directional Opto-Isolated, User can define either common positive or common negative
Arrangement	4 Channel per Group, total 3 groups. Each group will have individual common input
Input Range	12V to 24V DC

Output Channel

Total Channel	4
Output Type	Relay dry contact
Arrangement	One common output for all 4-output channel
Current Rating	Each channel 5A Max.
	Total channel 5A Max.

Wi-Fi Specification

Frequency	2.4Ghz~2.5Ghz
Supported Wi-Fi Protocol	802.11 b/g/n
Antenna Type	Internal
Security Protocol	WPA/WPA2 personal, WPA/WPA2 Enterprise
Encryption Protocol	WEP/TKIP/AES

Backend Server Connectivity

Server Connection	MQTT Broker with TCP, TCP-TLS, Web-Socket Connection
Server Port	User Definable
Encryption/Security	Public CA, Self-Signed Certificate
Messaging Format	JSON
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Partner with Us

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Project Manager

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