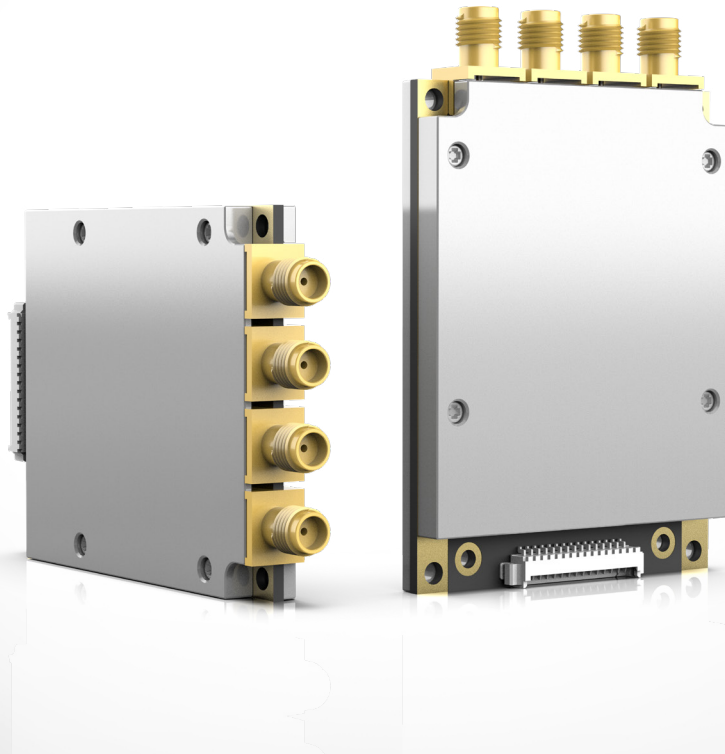
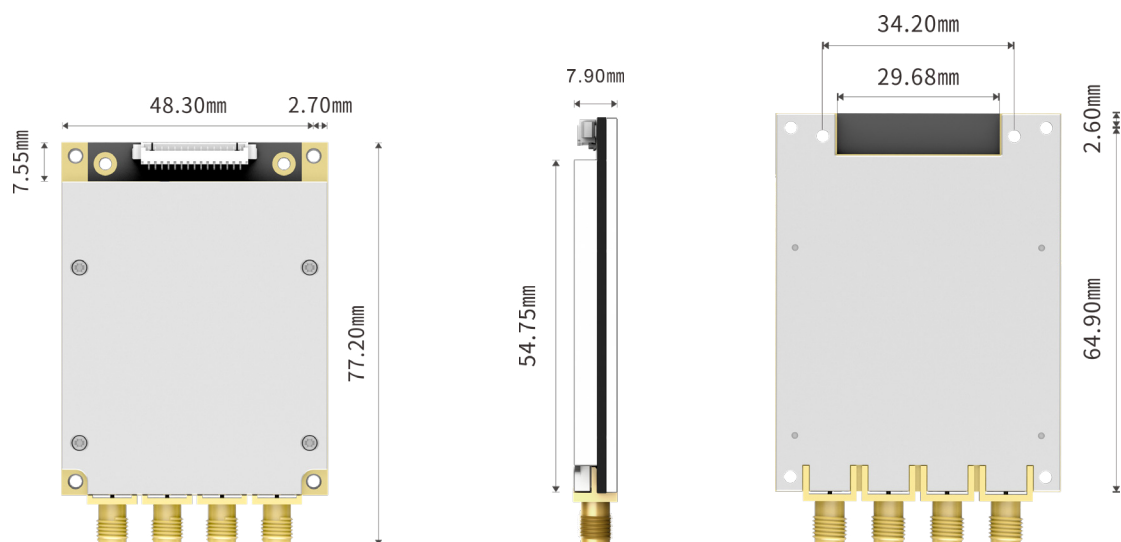




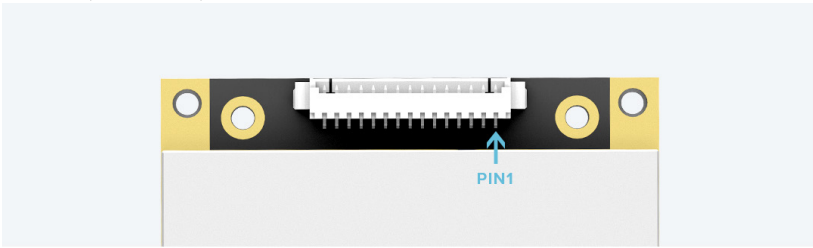
# 4-Port RFID Module

This is a 4-port RFID module based on Impinj E710 chip that can be used in fixed RFID readers. This reliable module is small in size, low in power consumption, and high in stability. It is also resistant to electromagnetic interference and good at heat dispersion. The module appeals to challenging industries like warehousing, logistics, apparel, production lines and such.

## Dimensions



## Interface Definition (15 PIN)



| PIN | Interface | Description                                   |
|-----|-----------|-----------------------------------------------|
| 1   | GND       | Negative                                      |
| 2   | GND       |                                               |
| 3   | VIN       | Positive<br>Input voltage range: 3.5-5.25 VDC |
| 4   | VIN       |                                               |
| 5   | GPIO3     | Reserved GPIO 3.3V TTL level                  |
| 6   | NC        |                                               |
| 7   | GPIOI     | Reserved GPIO 3.3V TTL level                  |
| 8   | BUZZ      | Driving 3.3V buzzer                           |
| 9   | UART_RXD  | UART receive 3.3V TTL level                   |
| 10  | UART_TXD  | UART send 3.3V TTL level                      |
| 11  | USB_DM    | USB_DATA(-)                                   |
| 12  | USB_DP    | USB DATA(+)                                   |
| 13  | GPIO2     | Reserved GPIO 3.3V TTL level                  |
| 14  | EN        | >1.25V power-on mode<br><1.18V standby mode   |
| 15  | NC        |                                               |

## Specification

| Model                    |                                                                                                           |
|--------------------------|-----------------------------------------------------------------------------------------------------------|
| Development Board Module | CM-X_EDCB                                                                                                 |
| Physical Characteristics |                                                                                                           |
| Dimensions               | 77.2 mm x 51.0 mm x 7.9 mm                                                                                |
| Weight                   | 52.0 g / 1.83 oz.                                                                                         |
| RFID Features            |                                                                                                           |
| RF Chip                  | Impinj E710                                                                                               |
| Air Interface Protocol   | EPCglobal Gen2 (ISO18000-6C)                                                                              |
| Working Frequency        | 865-868 / 920-925 / 902-928 MHz ( custom-design for frequency band )                                      |
| Output Power             | 5-30dBm adjustable; 1dB step interval; +/- 1dB precision                                                  |
| Output Power Flatness    | +/- 0.2dB                                                                                                 |
| Antenna Interface        | 4-channel 50Ω RF connector SMA Receptacle                                                                 |
| Regions Supported        | FCC 902-928 MHz; ETSI 865.6-867.6 MHz; China 920-925 MHz; Others for customization (865-868, 902-928 MHz) |
| Receive Sensitivity      | < -86 dBm                                                                                                 |
| Tag RSSI                 | Supported                                                                                                 |
| Antenna Detector         | Supported                                                                                                 |
| Ambient Temp Monitor     | Supported                                                                                                 |
| Working Mode             | Single/DRM                                                                                                |

| Communication Interface                            |                                             |
|----------------------------------------------------|---------------------------------------------|
| Connector                                          | 15 PIN W-TO-B Connector                     |
| Host Communication                                 | UART 3.3V TTL Level<br>Baud Rate: 115200bps |
| Power Supply                                       |                                             |
| Input Voltage                                      | DC 3.5-5.25V                                |
| Power Consumption in RF Output Mode                | 7.5W                                        |
| Power Consumption in Standby (EN high TTL level)   | 0.175W                                      |
| Power Consumption in Power Down (EN low TTL level) | 42.5μW                                      |
| User Environment                                   |                                             |
| Operating Temp.                                    | -13°F to 149°F / -25°C to 65°C              |
| Storage Temp.                                      | -40°F to 185°F / -40°C to 85°C              |
| Humidity                                           | 10% - 95%                                   |
| Reading Performance                                |                                             |
| Fastest Read Rate                                  | 950+ tags/s                                 |
| Reading Range                                      | Up to 10m (with 4dBi antenna)               |