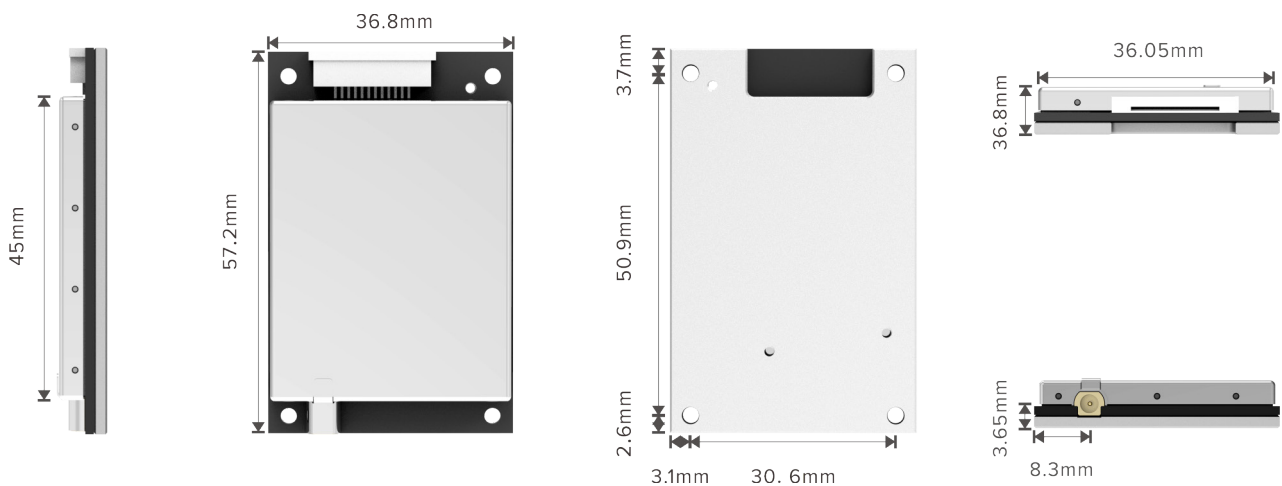


## CM-1

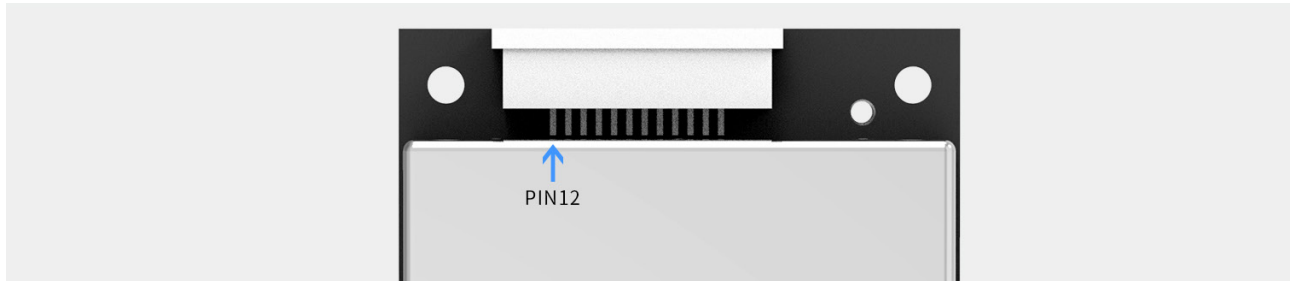
### UHF RFID Reader Module

Chainway CM-1 is a single channel UHF RFID reader module. It can be integrated in mobile UHF RFID readers, fixed readers, card readers and etc. With high integration level, it is small in size, low in power consumption, 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 (12 PIN)



| PIN# | Interface | Description  |
|------|-----------|--|
| 1    | VIN       | 3.5-5.25VDC  |
| 2    | VIN       |  |
| 3    | GND       | Ground   |
| 4    | GND       | Ground   |
| 5    | EN        | High LLT level (>1.2V) boot the module<br>Low LLT level (<0.4V) out the module |
| 6    | IO1       | Reserved GPIO 3.3V TTL level   |
| 7    | IO2       | Reserved GPIO 3.3V TTL level   |
| 8    | IO3       | Reserved GPIO 3.3V TTL level   |
| 9    | RXD       | UART receive 3.3V TTL level  |
| 10   | TXD       | UART transmit 3.3V TTL level   |
| 11   | USB_DP    | USB_DATA(+)  |
| 12   | USB_DM    | USB_DATA(-)  |

## Specification

| Model                    |   |
|--------------------------|---|
| UHF RFID Reader Module   | CM-1  |
| Development Board Module | CM-X_EDCB   |
| Physical Characteristics |   |
| Dimensions               | 57.2mm x 36.8mm x 7.6mm   |
| Weight                   | 26.0g   |
| RFID Features            |   |
| RF Chip                  | Indy R2000  |
| Air Interface Protocol   | EPCglobal Gen2 (ISO18000-6C)  |
| Working Frequency        | 860 – 960MHz  |
| Output Power             | 5-30dBm adjustable; 1dB step interval;<br>+/- 0.5dB precision   |
| Output Power Flatness    | +/- 0.2dB   |
| Antenna Interface        | 50Ω RF connector MMCX Receptacle  |
| Regions Supported        | FCC 902-928 MHz; ETSI 865.6-867.6 MHz; China 920-925MHz; Others for customization (865-868, 902-928MHz) |
| Receive Sensitivity      | < -88 dBm   |
| Tag RSSI                 | Supported   |
| Antenna Detector         | Supported   |
| Ambient Temp Monitor     | Supported   |
| Working Mode             | Single/DRM  |

| Communication Interface                            |   |
|--|---|
| Connector  | 12 PIN FPC 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                | 5.3W@30dBm                                  |
| Power Consumption in Standby (EN high TTL level)   | 0.15W                                       |
| Power Consumption in Power Down (EN low TTL level) | 1μW   |
| User Environment                                   |   |
| Operating Temp.                                    | -25°C to 65°C                               |
| Storage Temp.                                      | -40°C to 85°C                               |
| Humidity   | 10% - 95%                                   |
| Reading Performance                                |   |
| Reading Rate                                       | >200 tags/s                                 |
| Reading Range                                      | >10m (with 4dBi antenna)                    |

Notice: Product specifications are subject to change without prior notice. / Model: CM-1 / Update Date: 2018-03-09

**CHAINWAY®**

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