

EGM-20R3UM2Y  
Usersmanual

## 1. Product Summary

## 1.1. Overview

This product is a reader / writer module that can read and write contactless IC cards / tags conforming to ISO / IEC 15693 · 18092.

When the corresponding TAG exists in the communication area of the antenna, the EGM-20R3UM2Y reads or writes the tag data by controlling the higher control program.  
EGM-20R3UM2Y: Asynchronous serial of USB interface with MCU.

## 1.2. 1 Basic specifications

The basic specifications of EGM-20R3UM2Y are as follows.

item	specification
Radio section	Compliant with ISO 15693 · 18092
	Carrier frequency 13.56 MHz
	Modulation method PM / ASK 100%, 8 to 30%
	Anti-collision supported
Host interface	USB2.0 Compliance 38.4kbps 81N * (The communication speed is fixed)
	micro USB Type-B
Reading distance	With specified antenna used within 50 mm * 1 Metal influence
Power-supply voltage	5.0V/ 500mA(max.)
Size	119.1mm×67.1mm×16mm
External antenna connection	None
Environmental condition	Operating temperature / humidity: 0 ° C to + 50 ° C / 20% to 80% (without condensation) Storage temperature / humidity: -10 ° C to + 70 ° C / 10% to 90% (without condensation)

**\* 1: There may be influence on reading if metal is around. Please make sure that there is no metal from the periphery of the board 10 mm or more, from the bottom of the board 20 mm or more, please use.**

**Also, the reading distance changes greatly depending on the ambient environment and tag performance.**

### 1.2.2 Radio Act

This product incorporates a reader / writer board that has received the type designation as stipulated by the Japanese Radio Law. Therefore, it is not necessary to apply for permission to install radio frequency equipment in Japan. However, please be aware that if you remodel and emit illegal radio waves, you will be violated by the Radio Law and you will be punished.

### 1.2.3 FCC

#### 15C/15B

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### FCC CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### 15B

#### EGM-20R3UM2Y

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Yaskawa America, Inc.

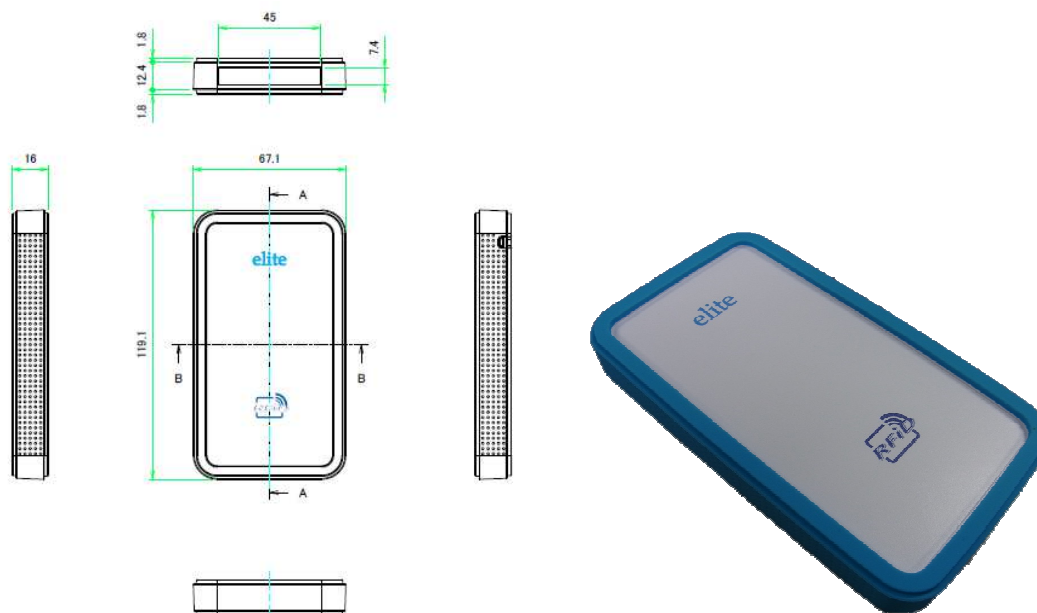
Address : 2121 Norman Drive S, Waukegan, IL 60085, U.S.A

Tel : +1-847-887-7457

### 1.2.4 FCC\_ID Product Description

Remove the blue rubber from the product and label it with FCC\_ID on the bottom of the white case.

### 1.2.5. Product dimensions



Host interface	USB interface (virtual COM port) USB-A type connector
Power supply	DC 5 V (It works with USB bus power.)
Size	119.1mm×67.1mm×16mm

## 2. Delivery specification

### 2.1.1. Deliverables

This product: EGM-20R3UM2Y ,  
micro USB cable(Use a USB cable with two ferrite cores.)

※ Test the USB cable with two ferrite cores, and the USB cable is supplied with the user bundled with the product, the user must use the specified USB cable.

CD-ROM Attachment: USB driver, operation confirmation Demo application

### 2.1.2 Packaging specification

This product: air cap packaging, white box packaging

## 3. Warranty period

1 year (main body only)

※ With warranty provision

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