



# Brilliant RFID System

## Multi-Function Reader

## MF Reader

### **Manufacturer and publisher**

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**Brilliant Network & Automation Integrated System Co., Ltd.**



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## 1 Introduction

The Brilliant CIDRW(Carrier ID Reader/Writer) , is BRILLIAN' s RFID(Radio Frequency Identification) system.

The way of basic setup:

Put a Transponder(Tag) fixed on the goods which you need to get goods information. The Transponder has a data record for the goods' .

During the Host computer sent a order message to the CIDRW through RS232 , The CIDRW will sent back the goods information which read from the Transponder by radio frequency.

## 2 FCC Rule

Un-license band: 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.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ◆ Reorient or relocate the receiving antenna.
- ◆ Increase the separation between the equipment and receiver.
- ◆ Connect the equipment into an outlet on a circuit different from that to which the receiver is needed.
- ◆ Consult the dealer or an experienced radio/TV technician for help



### 3 FCC Rule Modular

This device is intended only for OEM integrators under the following conditions:

1) The antenna must be installed such that 20 cm is maintained between the antenna and users. For laptop installations, the antenna must be installed to ensure that the proper spacing is maintained in the event the users places the device in their lap during use (i.e. positioning of antennas must be placed in the upper portion of the LCD panel only to ensure 20 cm will be maintained if the user places the device in their lap for use) and

2) The transmitter module may not be co-located with any other transmitter or antenna.

As long as the 2 conditions above are met, further transmitter testing will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).IMPORTANT NOTE: In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC

authorization.

End Product Labeling

This transmitter module is authorized only for use in devices where the antenna may be installed such that 20 cm may be maintained between the antenna and users (for example access points, routers, wireless ASDL modems, certain laptop configurations, and similar equipment). The final end product must be labeled in a visible area with

the following: "Contains TX FCC ID: {2A583-MFREADER}".


RF Exposure Manual Information That Must be Included

The users manual for end users must include the following information in a prominent location "IMPORTANT

NOTE: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter."Additional Information That Must be Provided to OEM Integrators

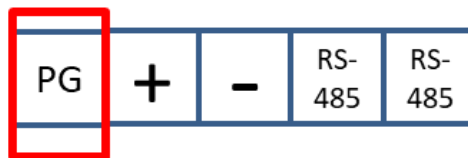
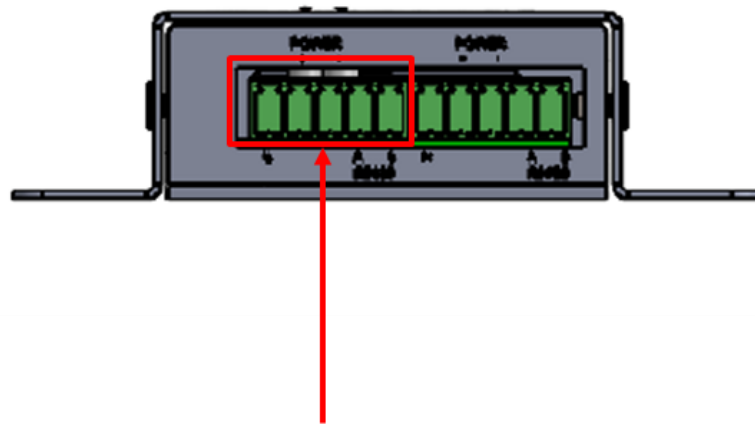
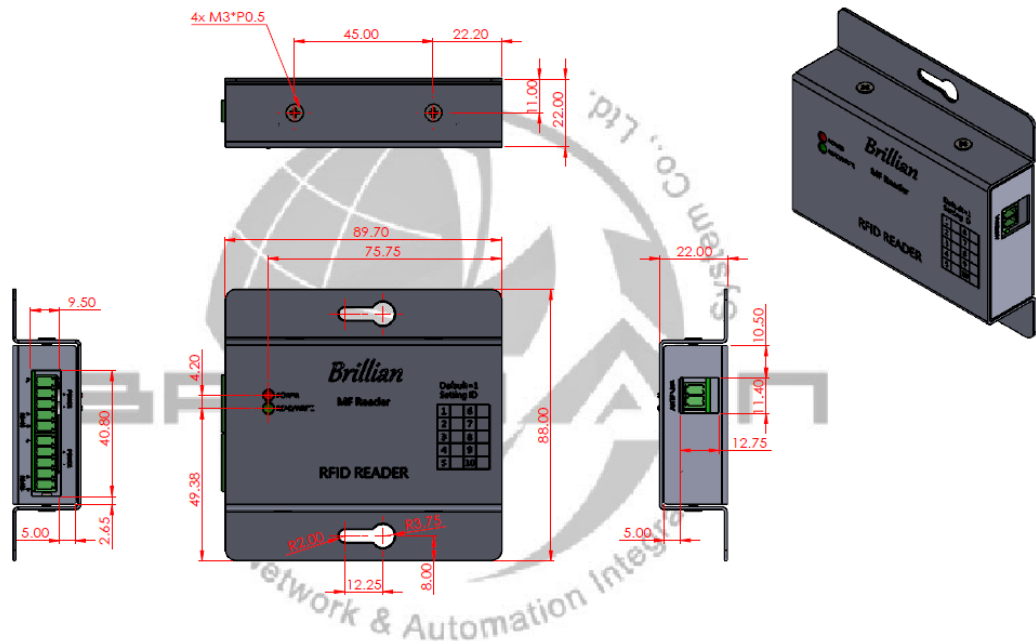
The end user should NOT be provided any instructions on how to remove or install the device.

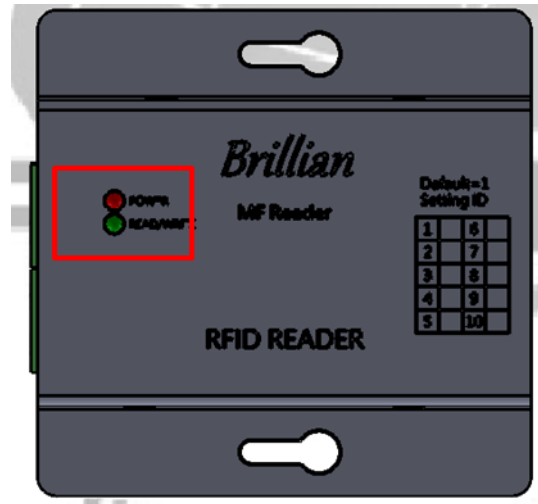
4 MF Reader SPEC

Type	MF Reader
Working voltage	DC 12~24V
Idle current	45mA
Reading/Writing impulse Rod Antenna current	1A
Working frequency	134.2k Hz
Communication spec.(RS232)	9600,n,8,1
Antenna	Brilliant Antenna
Dimensions	L : 89.7 W : 88 H : 22
Certification MARK	
<p>Remark : AI2400 &amp; MF Reader Use the same way as the application</p>	

## 5 MF Reader Module

### 5.1 Module Size



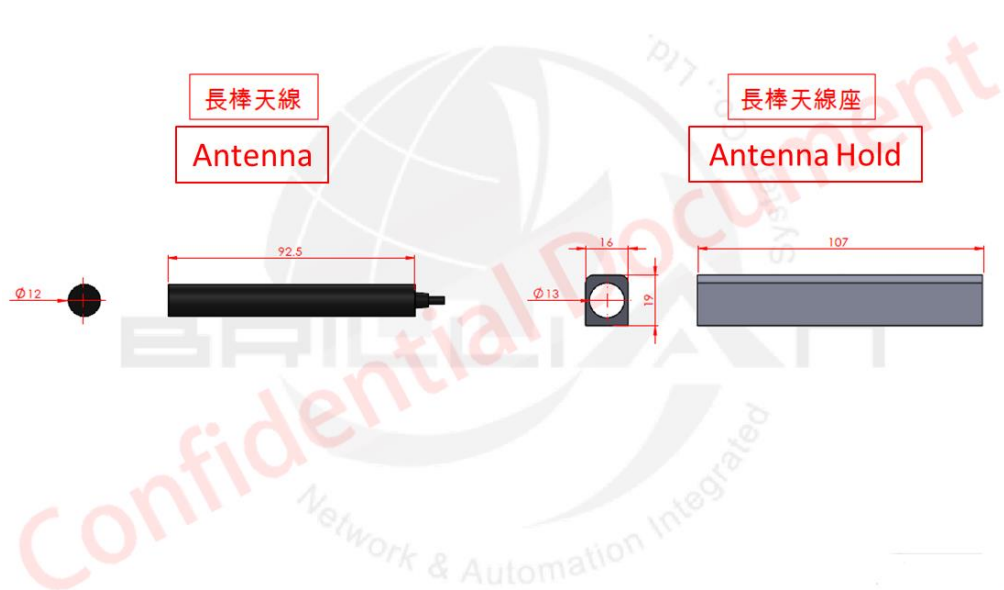


RED : POWER  
Green : READ/WRITE



Antenna

5.2 Antenna





## Revision History

#	Date	Rev.	Description	Name
1	Feb 27, 2022	1.0	Standard Version	Roxas Li