

## ● Introduction

PUA-310-0/NR2H02 is one of most compact indoor/outdoor proximity reader, which is an advanced RFID contactless reader and designed smart for connection to RS232 input control panel in access control systems as well as identification systems. It offers top reliability and performance.

## ● Specification

RFID frequency	125KHz
Applicable cards	EM 4102 or compatible
Reading range	10 ±1 cm
Output format	RS-232
Power input	12V DC
Material	ABS
Dimensions(L)×(W)×(H)mm/inch	118x75x16 / 4.6x2.9x0.6
Operating temperature	-10°C~75°C
Storage temperature	-20°C~85°C
Humidity	20% ~ 90%RH, non condensing



## ● Installation Guide

1. It's surface mounted, please select a position and appropriate height to mount the reader, mark the location of the mounting holes, using the template which follows this instruction sheet.
2. Drill a 8 mm hole for passing the readers cable, through to the cavity wall.
3. Drill two 5 mm/mm holes to secure the reader to the wall using screws provided.
4. LED's normal state is Orange in power on, upon legal card read, LED changes to Green color.
5. Normally, please make sure to connect wires 1 to 5 for operation of the reader.
6. 12 VDC linear type (not switching type) power supplies that is isolated (not powering other devices/readers).
7. Once you using a separate power supply for the reader, a common ground should be established between the reader and control system. I.e. the ground system of reader and the ground system of the control should be at same potential.
8. The reader shield wire should be connected to the shielded cable of the control, so that avoid the possibility of the reader to be affected by external interference.

## ● Wire Configuration

	Wire No.	Color	Function
■ 1	1	Red	+12VDC
■ 2	2	Black	Ground
■ 3	3	Yellow	Shield/Ground
□ 5	5	Green	NC
■ 6	6	White	TX+

## ● Output format

STX(02Hex)	CARD ID(10 ASCII)	CR	LF	ETX(03Hex)
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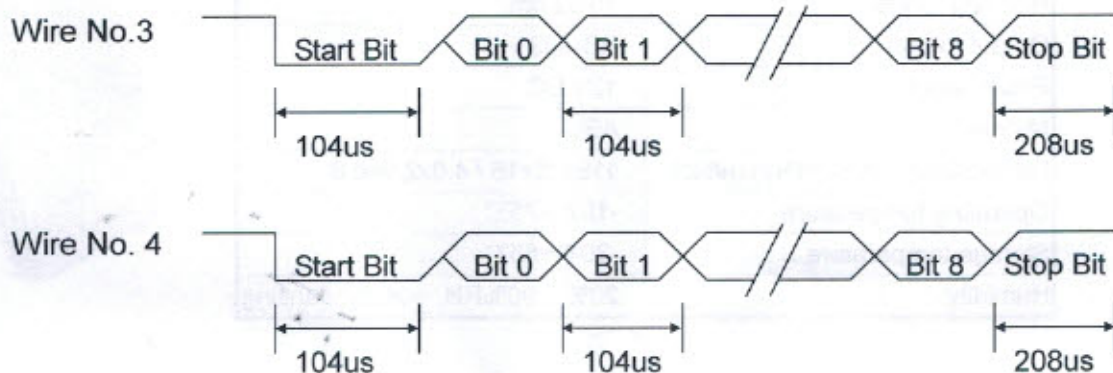
If the card no. is 18000D7E90, you will get the following Hex value.

STX  
Hex value : 02H, 31H, 38H, 30H, 30H, 30H, 44H, 37H, 45H, 39H, 30H, 03H  
ETX

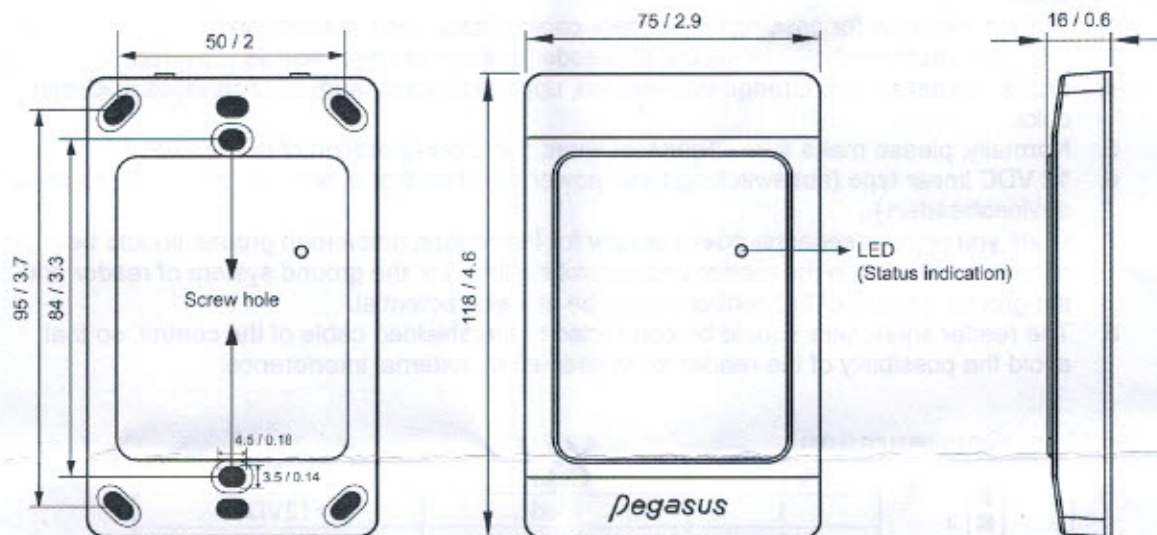
## Transmission Spec.

Baud rate : 9,600 bps  
Parity bit : none  
Data bit : 8  
Stop bit : 1

## ● Serial Clock Output



## ● Dimension: Unit(mm / inch)



Specifications subject to change without notice for further modification.