

# RFID Reader

1010501610



- Easyident-Legic Module inside
- Easily attachable to the device using screw holes.
- Compatible with a wide range of faytech devices
- Solid design with Aluminum frame

The RFID reader, with easyident-Legic Modul inside, can be attached to the back of the device in different positions using the screw holes available.

This solid RFID reader with aluminum case is compatible with a wide range of faytech devices.

It is the perfect accessory to turn your device into:

- Time-tracking machine
- Entrance control device
- Employee / machine login device
- Member login device (e.g. Fitness Studio)



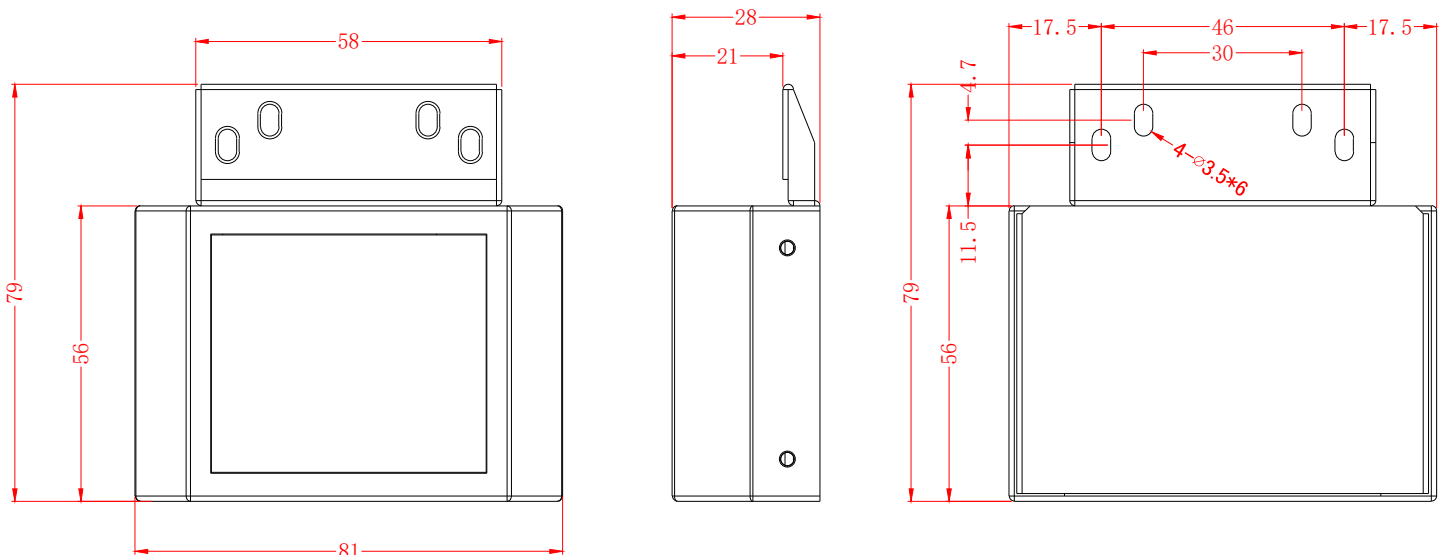
<b>Product name</b>	<b>RFID Reader</b>
<b>Article code / EAN number</b>	<b>1010501610</b>

Physical Properties	
Operating Temperature (°C)	-10 ~ +40
Weight (g)	150
Housing material	Aluminum with Plexiglass Front
Dimensions (cm) L x W x H	5.60 x 8.10 x 2.80
Cable length (cm)	1.20

Range of Application	
Capacitive Touch PC	10 - 21.5" (no 15.6")
Embedded Touch PC	13.3" - 21.5"
Capacitive Touch Monitor	13.3" - 21.5" (no 15.6")

Technical Specifications	
Serial Interface	With TTL Output
Baud Rate	19200, 8, n, 1
Carrier Frequency (MHz)	13.56
Detection Time (ms)	50

Power	
Power Supply	+ 5V DC +/- 5%
Active power consumption (mA)	~40



## Data Output Format

The RFID Reader provides 3 different data, these data are stored in 1 datastring and transmitted this way. The user can choose the individual values from the datastring. The following data is read and transmitted:

System Identification (8 bytes)  
Application Number (6 bytes)  
Chip Serial Number (8 bytes)  
Checksum

Then follows the output of <CR> and <LF>. The output is in ASCII-HEX as follows.

Example: `01020304123456AABBCCDDZ <0xD> <0xA>`

## Checksum Calculation

The checksum is calculated as follows. Data example:

`01020304123456AABBCCDD`

Always 2 bytes are added.

$01 + 02 + 03 + 04 + 12 + 34 + 56 + AA + BB + CC + DD = 364$

In the result (364) only the last digit is used, which in our case is 4.

The output is then: `01020304123456AABBCCDD4 <0xD> <0xA>`

## Command Overview

The PC can send the following control characters to the RFID Reader.

- Control Code 0x86 Hex = Automatic mode switch off
- Control Code 0x87 Hex = Automatic mode switch on
- Control Code 0x60 Hex = Trigger for data transmission

### Control Code 0x86 Hex - Automatic mode switch off

The PC sends the control character 0x86 Hex to the reader. The reader then echoes this control character. The automatic transmission of the transponder number is switched off. If a transponder is held to the reader, the data is not transmitted automatically. The data must be retrieved in this mode via the control character 0x60 Hex. The data is then displayed as described above.

### Control Code 0x87 Hex - Automatic mode switch on

The PC sends the control character 0x87 Hex to the reader. The reader then echoes this control character. The automatic data transmission of the transponder number is switched on. If a transponder is held to the reader, the data is transmitted as described above.

### Control Code 0x60 Hex - Trigger for data transmission

The PC sends the control character 0x60 Hex to the reader. The reader then echoes this control character. If a transponder is in the reading range, its code is transmitted as described above. If there is no transponder in the reading range, no data is transmitted (Only the echo from the control character).

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