

ID Access 1500 V4, OEM-HF-R845-ET-IDT-V4
13.56 MHz OEM RFID Reader
Automatic Data Acquisition from Mifare Classic
with Relay, LED and Buzzer control

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1 Introduction

1.1 Additional Command to Switch between the Short Function and Long Function

Please define a command for this purpose.

1.2 Automatic Function of the RFID Reader, Short Function

The reader automatically detects a Mifare Classic ISO14443A type tag.

Then it sends the UID + CR + LF to the Ethernet interface.

The settings of the WizNet interface IC determines the target address and port.

The telegram contains this data:

- 8 or 14 ASCII characters for the UID
- 0x0D (CR)
- 0x0A (LF)

1.3 Additional Function of the RFID Reader

Control and time the LED colours red, blue and green.

Control and time the Relay closing contact.

Control and time the Buzzer signal.

Please see chapter 3 for details.

1.4 Important Note

The devices are set to DHCP. Please configure them to a fixed IP address suitable for your network.

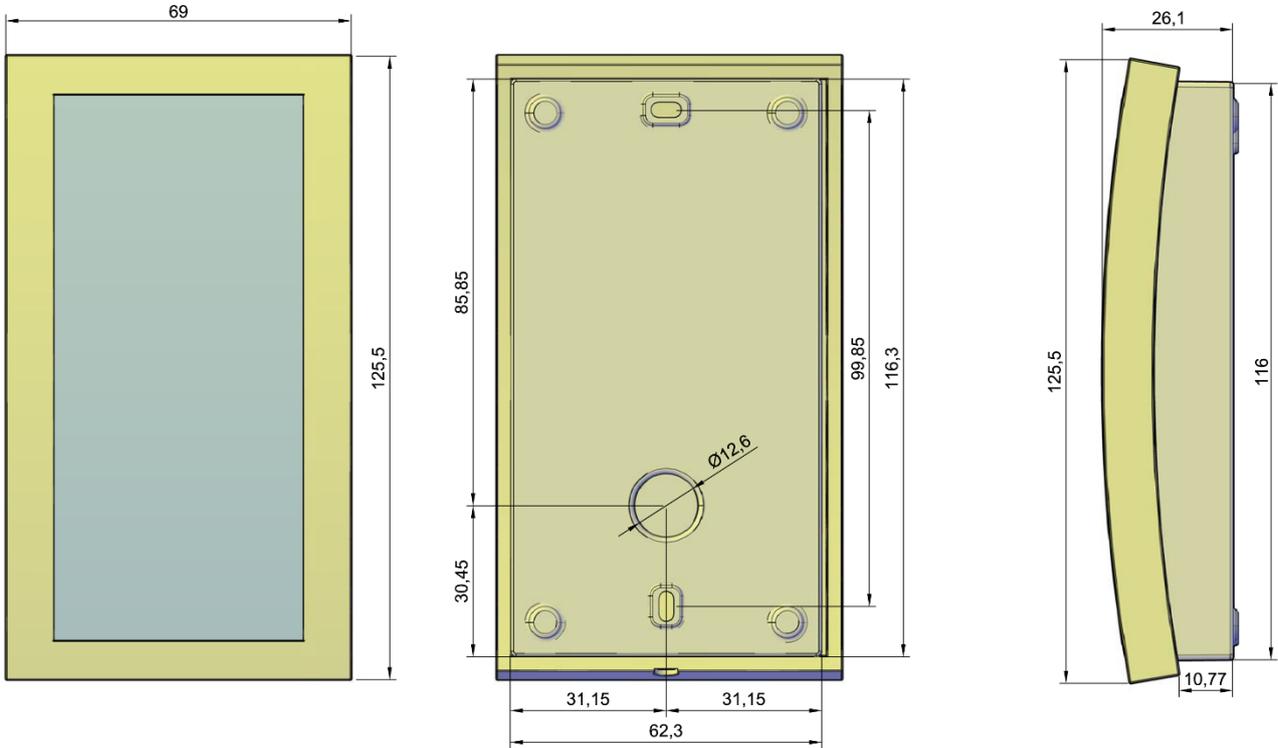
1.5 Overview of the Initial Operation

- Open the housing (see chapter 2.2)
- Disconnect the antenna and connect Ethernet with PoE or Ethernet and power supply (see chapter 2.4).
- If necessary, connect the relay (NO contact, NO).
- Make the network settings (own IP address of the device, IP address and destination port of the server). The easiest way to do this is with the 'S2E ConfigTool_V1.4.exe' software because it can find the device in the network.
- Attach the antenna again. (see chapter 3)
- Close the housing (see chapter 2.3)
- Set up the device in your management software (e.g. Athletics from Terra Software).

2 Installation

2.1 Dimensional Drawing

Table housing, drawing with dimensions and mounting holes.



2.2 Open the Housing

Access the pin from below:



Remove it completely:



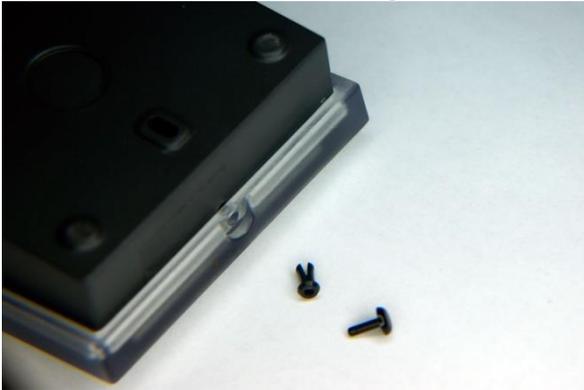
Pull out the pinhead with your finger:



Now you can lift off the cover.

2.3 Close the Housing

Separate both parts before re-fitting:



Re-fit the expansion peg first:



Put in the center pin:

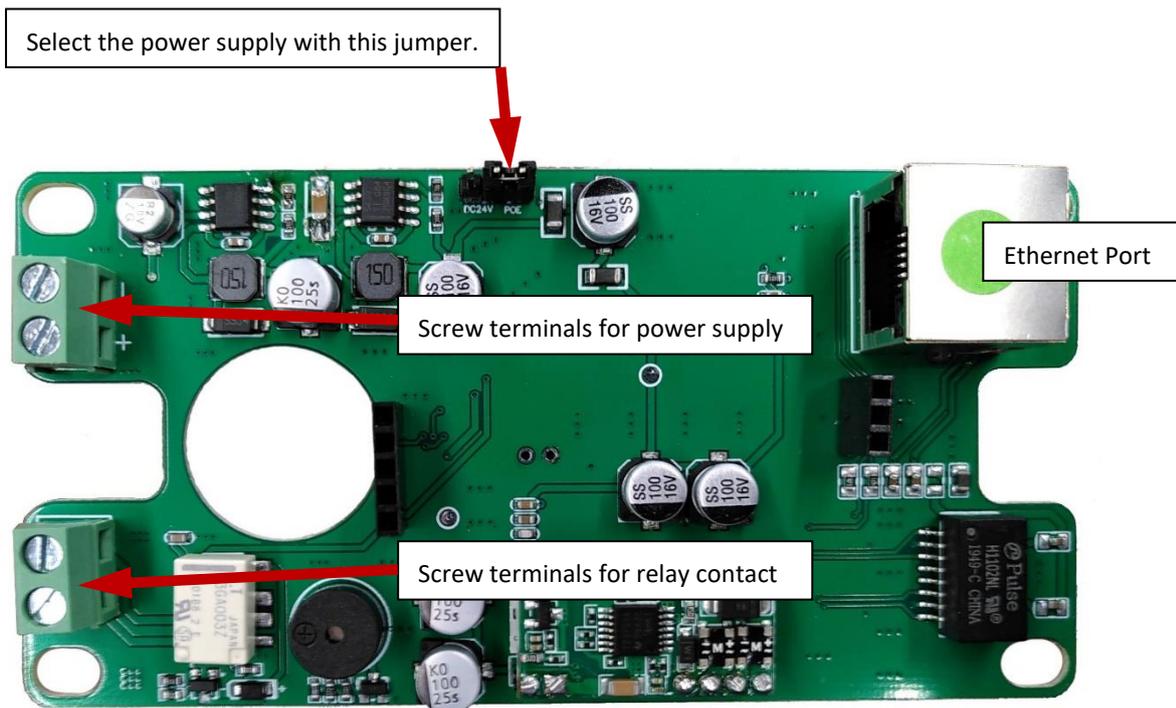


Press down the center pin completely:



2.4 Electrical Connection

Remove the antenna PCB to gain access to the Ethernet port.



3 Initial Operation

Configuration of the WizNet Ethernet Client via Webinterface or with S2E ConfigTool_V1.4.exe

Tab "Basic Settings"

- 1: Select the desired network interface of your PC from the drop-down menu.
- 2: Click on [Search], now the device you want to set should be listed.
- 3: Select the desired device to set.
- 4: Click on "Use the Follow IP Address" and the desired Ethernet parameters of the device.
- 5: Device Name: Here you can give the device a name that is helpful to you.
User Name/Password: this is the user name and password for access via the web interface. You can use this to block access. In addition, you can disguise access to the web interface with an HTTP port that differs from the standard.
- 6: Please do not forget to save changed settings with [Apply Settings].

Tab "Port 1"

- 1: Enter your server address and port here.
- 2: This is port to send commands to this RFID device.
- 3: In case you prefer DHCP, you can configure the device to automatically send a message for identification.
- 4: This will prevent random data to be sent.

In case you need to change settings, please do not forget to save changed settings with [Apply Settings].

Important Note!

Please do not change the values "Baud Rate", "Data/Stop/Parity", "Flow Control", "Socket Type".
These settings are important for the internal communication between the RFID module and the Ethernet interface module.



4 Control Relay, LED and Buzzer

All data is ASCII encoded.

4.1 Overview

Send a command string as plain contents of an IP package to the device.

The command sent must be composed of 6 or 12 characters:

RRRBBB or
RRRBBBLLLTTT

The data fields in Detail

RRR Relay activation time (steps of 100 ms, decimal value)
BBB Buzzer activation time (steps of 100 ms, decimal value)
LLL RGB colour of LED
TTT LED activation time (steps of 100 ms, decimal value)

4.2 LED Colour Coding

000	OFF
001	blue
010	green
011	cyan
100	red
101	violet
110	yellow
111	white

4.3 Example Telegrams

Access Granted

020005010005

- ⇒ Activate relay for 2000 ms
- ⇒ Activate buzzer for 500 ms
- ⇒ Set LED to green...
- ⇒ ...for 500 ms

Access Denied

000010100025

- ⇒ Do not activate relay
- ⇒ Activate buzzer for 1000 ms
- ⇒ Set LED to red...
- ⇒ ...for 2500 ms

5 Revision History

Version	Date	Notes
1.0	2024-05-17	Initial draft
1.2	2024-06-13	Configuration of Ethernet interface added
1.3	2024-06-14	RFID Tag Access Information updated (Key B), Antenna changed (with Ferrite), Changed to TCP Client
1.4	2024-07-08	Keys update, Timing Command update, Read Memory Blocks changed
1.5	2024-11-15	Chapter Sequence changed, Overview of the Initial Operation added, Type Designations updated, Read Memory Blocks removed (this is device V5)