



## ads-tec IRF3000 Series Industrial Router and Firewall User Guide

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## Safety



### ATTENTION

Personal injuries and damage to property through improper use All installation and service work performed on the device must be performed only under safe, secure and de-energised conditions!



### Note:

Always adhere to the safety measures applicable when handling components at risk of being damaged by electrostatic discharges in accordance with EN 61340-5-1/-2.

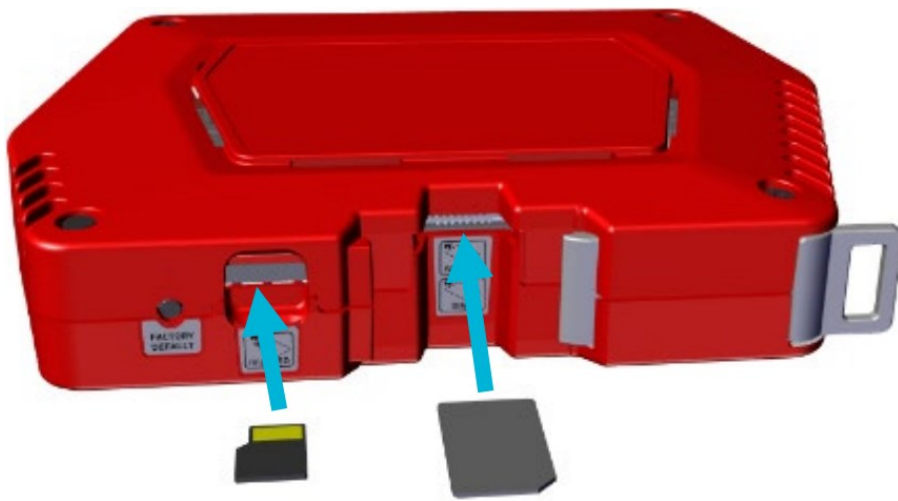
## Scope of delivery

- 1 x Industrial router and firewall, type IRF3xxx
- 1 x 4-pin plug for power supply
- 1 x 3-pin plug for Modbus RTU
- 1 x 4-pin plug (grey) for digital I/O #2
- **Only with IRF38:** 1 x 8-pin plug for digital I/Os #3...5
- 1 x Quick-start guide (this document)
- **Optional:** 2 x Mobile communications antenna
- **Optional accessory:** 1 x VESA holder

## Optional: Inserting SIM card / smart card / microSD

SIM cards and smart cards (SC) in the ID-000 format as defined in ISO 7816 (25×15 mm) can be used. The SIM card for mobile communications must be inserted into the bottom slot (SIM1). The smart card is intended for backing up the configuration data or for connecting to Big-LinX and must be inserted into the top slot (SC/SIM2). You can insert a microSD card with up to 2048 GB as a memory expansion into the left slot.

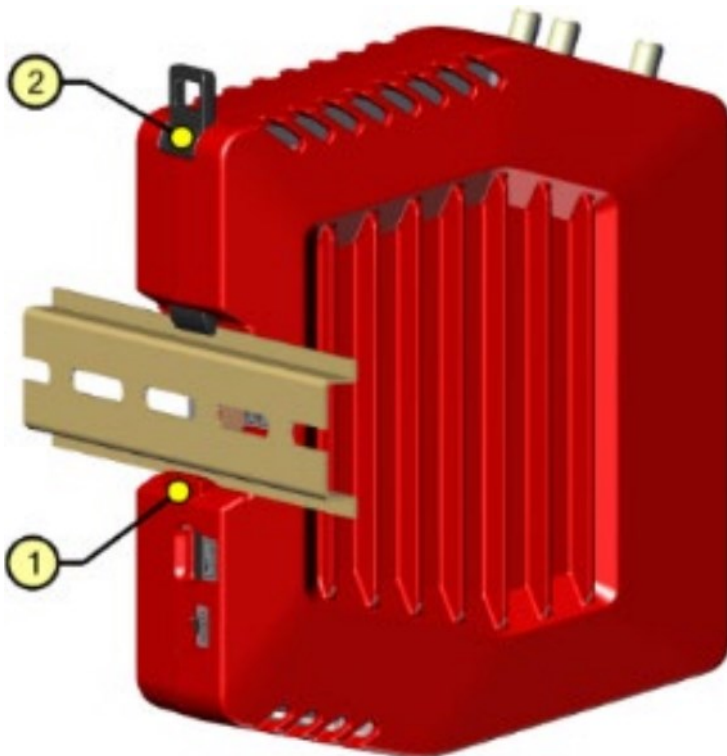
- Insert the cards the right way round as shown in the figure.



## Assembly

### Attaching to top-hat rail

1. Position the IRF on the top-hat rail from below at an angle (1).
2. Pull the top-hat rail locking mechanism (2) upwards using a screwdriver, push the device onto the upper side of the top-hat rail and remove the screwdriver.
3. The top-hat rail locking mechanism springs back to its original position.
4. Check that the IRF is seated securely on the top-hat rail.

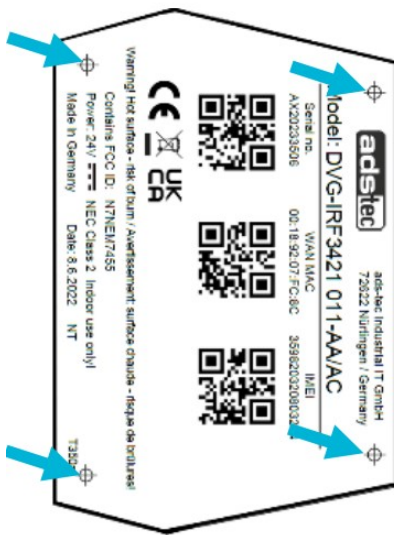


### Detaching from top-hat rail

To detach the IRF from the top-hat rail, pull the top-hat rail locking mechanism (2) upwards using a screwdriver and remove the device downwards at an angle.

### Optional accessory: Attaching the VESA holder

Screw the mounting plate directly onto the device label using the screws provided. The positions of the screw holes are marked with target crosses ( ) on the label.



### Optional: Attaching antennas

Screw the mobile communications antennas to the antenna connections directly or via SMA extension cables.  
Only with IRF38: GNSS = connection for a GPS antenna



### Installation

#### Modbus RTU (RS-485) (electrically isolated)

Electrical bus load: 1/8 unit load; impedance: 96 kΩ.

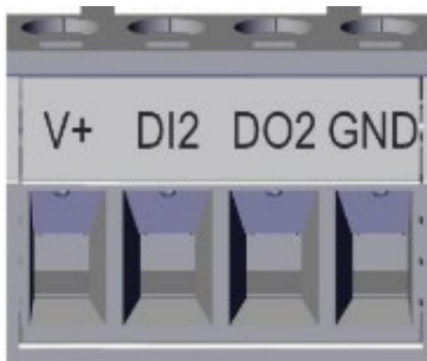


**GND** Reference potential (common) for the data signals

**D-** Inverted data signal

**D+** Non-inverted data signal

#### Digital I/O #2 (electrically isolated)



**V+** Supply voltage +24 VDC  $\pm$  20 %

**DI2** Digital input #2

**DO2** Digital output #2, max. 0.5 A

**GND** Reference potential

#### Power supply of the device and digital input #1



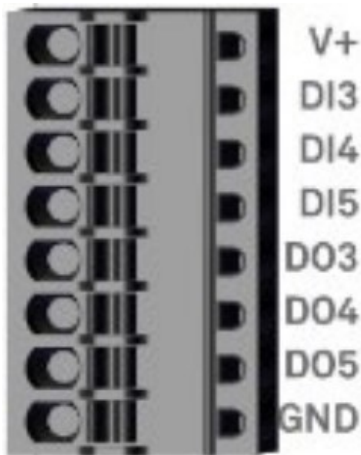
**DI** Digital Input #1: +24 VDC  $\pm$  20 % Reference potential is 0V of the device.

**FE** Functional earth (required for EMC)

**0V** Reference potential

**V+** Supply voltage +24 VDC  $\pm$  20 %

#### Only IRF38xx: Digital I/Os 3...5 (electrically isolated)



**V+** Supply voltage +10...30 VDC

**DIx** Digital inputs #3...5

**DOx** Digital outputs #3...5, together max. 1.5 A

**GND** Reference potential

## Commissioning

### Connecting IRF to PC

During initial setup, the IRF must be connected to a PC. Connect the connection ETH2 of the IRF to your PC using a patch cable.

### Configuring LAN network adapter of your PC

Open the Properties of the used network adapter and enter the following parameters:

**IP address:** 192.168.0.100

**Subnet mask:** 255.255.255.0 (or, depending on the OS: "24")

The last number of the IP address must be a number between 1 and 255, e.g. "100".

### Calling web interface of IRF

To access and open the device web interface, start up your web browser. Enter the following IP address in the address field of the browser:

<http://192.168.0.254>

Confirm your entry. Then, enter the default log-in details:


**User name:** admin

**Password:** admin

The web interface of the device opens. Follow the instructions of the setup wizard.

Further information as well as accessories can be found on our website [www.ads-tec.de](http://www.ads-tec.de)

## Documents / Resources

	<p><a href="#">ads-tec IRF3000 Series Industrial Router and Firewall</a> [pdf] User Guide</p> <p>IRF3000 Series Industrial Router and Firewall, IRF3000 Series, Industrial Router, Router, Industrial Router and Firewall</p>
	<p><a href="#">ads-tec IRF3000 Series Industrial Router and Firewall</a> [pdf] Instruction Manual</p> <p>IRF3000 Series Industrial Router and Firewall, IRF3000 Series, Industrial Router and Firewall, Router and Firewall, Firewall</p>

References

-  [ADS-TEC](#)
-  [ads-tec.de](#)
-  [ads-tec.de/](#)