# **Start Guide**

# ICR-1601





# **ADVANTECH**

### **!** Safety Instructions

Please take care to following instructions:

- Use the router in compliance with national and international law and compliance with any special or additional restrictions regulating the use of the router in various applications and environments.
- To avoid possible injury and/or damage to the device, observe the relevant provisions and standards. Use only the original accessories as recommended. Unauthorized device or accessory modification or using accessories that have not been approved can result in router damage and/or violation of the regulations.
- Unauthorized device or accessory modification or using accessories that have not been approved can result in warranty termination.
- Do not open the router.
- Caution! Small children can swallow the SIM card.
- When connecting the device to a power supply, do not exceed the defined voltage.
- Do not expose the router to extreme ambient conditions. Protect the router against dust, moisture, and high temperature.
- It is recommended that you do not use the router at petrol filling stations. We recommend observing local restrictions concerning radio-based devices while working with explosive material, such as petrol filling stations or in chemical plants.
- While using the router close to personal medical devices, such as cardiac pacemakers or hearing aids, proceed with heightened caution.
- Operating the router too close to TV sets, radio receivers, personal computers, or telephones can cause interference.
- It is recommended that you create a copy or backup of the basic settings stored in the router's memory.



1



#### **Product Disposal Instructions**

The WEEE (Waste Electrical and Electronic Equipment: 2012/19/EU) directive has been introduced to ensure that electrical/electronic products are recycled using the best available recovery techniques to minimize the environmental impact. This product contains high-quality materials and components which can be recycled. At the end of its life, this product MUST NOT be mixed with other commercial waste for disposal. Check with the terms and conditions of your supplier for disposal information.



#### **First Use**

**AD\ANTECH** 

Before applying power to the router, connect all the components you need for your applications.

Do not run the router without an antenna connected to the main antenna connector. The energy from the transmission is effectively reflected by the open end and can damage the equipment.

#### 1. Antenna

Use SMA connectors to connect the antennas to the router; see the figure below. First, connect the main antenna to the *ANT* connector. Next, connect the second diversity antenna to the *DIV* connector to improve the quality and reliability of a wireless link.



#### 2. SIM Card

The SIM card slot for two Micro SIM cards (3FF with size of  $15.0 \times 12.0 \times 0.76$  mm) is located on the router's front panel. If you intend to use this device to communicate over a cellular network, please place an activated data-provisioned SIM card into the SIM card slot. Push your SIM card into the *SIM1* or *SIM2* slot until it clicks into place. You can install two SIM cards simultaneously to utilize the SIM card switching feature.

!

Disconnect the router from the power supply before handling the SIM card!



#### 3. Power

The router requires an external DC power supply. The DC voltage required is between 5 and  $24^1$  VDC. Please connect the power adapter DC 5 V/2 A to the PWR connector on the panel of the router; see the figure below.



QSG-0005-EN, November 14, 2024

<sup>&</sup>lt;sup>1</sup>Devices manufactured before 2024 support a maximum input voltage of 18 VDC. If you're unsure of your device's production date, please consult your Advantech sales representative to confirm which hardware version you have.

#### 4. Ethernet

For an initial configuration made in a web browser, connect a PC by an Ethernet cable to the default LAN interface, use the *LAN1* port; see the figure above. By default, this interface has the following configuration:

Connector	Purpose	Default Setting
LAN1	LAN port (default) Connect your PC to this port to get the router web interface.	DHCP Server IP Address: 192.168.1.1 NetMask: 255.255.255.0

# Configuration

## 1. Configuring the Device Using the Web Browser

You can use a web browser running on your PC to access the router web interface. Here you can perform router monitoring, configuration, and administration. First, connect the PC to the default LAN interface described in the *Ethernet* chapter. To get the router interface, enter the https://192.168.1.1 address in a web browser. Please note that usage of the HTTPS protocol for secure communication over the network is required.

By default, there is just the **admin user** account created on the router, having the initial **password** set to "admin". Log in to the web interface by the *admin* user and his password. See the configuration manual of the router for a detailed description and examples of the router configuration.

# 2. Restoring and Backing up the Router Configuration

The default factory settings will replace the current configuration if you reset the router. Therefore, we recommend you back up the router configuration before resetting the device. Refer to the configuration manual for more information.

You can restore the default router configuration once the router boots up and the *Status* LED starts blinking. To do so, press the *Reset* button on the router's front panel for more than 4 seconds. After you press this button, all settings reset to the default values, and the router will reboot.

After logging on to the device for the first time, we strongly recommend changing the default password due to security reasons.

For security reasons, we highly recommend updating the router's firmware to the latest version regularly. Downgrading the firmware to an older version than the production version or uploading firmware intended for a different device may cause the device's malfunction.

QSG-0005-EN, November 14, 2024

1



## Support

All product-related manuals, documents, and software can be found and downloaded on the website at icr.advantech.com/download address.



Hereby, Advantech Co., Ltd. company declares that the radio equipment type ICR-1601 complies with EU Directive **2014/53/EU**.

The full text of the EU Declaration of Conformity is available at the following internet address: icr.advantech.com/eudoc