

These short operating instructions apply for the following devices of INSYS icom:

- IMON-G100
- IMON-G200
- IMON-U300
- IMON-U310



www.insys-icom.com/manual ➔



It is intended for a quick commissioning by the operator. Refer to the associated manual for further information. This and other associated manuals can be found on our website in the menu Support and Downloads > Documentation. Scan the QR code above or enter the URL into your web browser.

Defects liability terms

A use other than the intended use, an ignorance of the safety instructions and the documentation, the use of insufficiently qualified personnel as well as unauthorised modifications exclude the liability of the manufacturer for damages resulting from this. The liability of the manufacturer ceases to exist.

Intended Use

The product may only be used for the purposes specified in the function overview of the manual. In addition, it may be used for the following purposes:

- Usage and mounting in an industrial cabinet.
- Switching and data transmission functions in machines according to the machine directive 2006/42/EC.
- Usage as data transmission device, e.g. for a PLC.

The product may **not** be used for the following purposes and used or operated under the following conditions:

- Use, control, switching and data transmission in machines or systems in explosive atmospheres.
- Controlling, switching and data transmission of machines, which may involve risks to life and limb due to their functions or when a breakdown occurs.

Technical Boundaries

Max. line length for antennas, power supplies, inputs and outputs as well as other signals: 30 m

Max. line length of serial connection lines: 3 m

Cable cross-section: 0.25 ... 2.5 mm², flexible lines require end sleeves

Support

If you need further support, please contact your sales partner or INSYS icom support. You can contact our support department via e-mail under support@insys-tec.de.

Technical Data

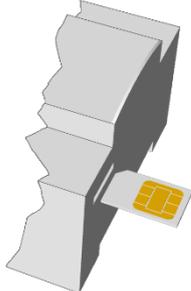
The product is only intended for the use within the permissible technical limits specified in the data sheets. These limits must be observed.

Operating voltage	12 V ... 24 V DC (±20%)	GSM/GPRS frequencies (2G)	850, 900, 1800, 1900 MHz (G100/200)
Power consumption	typ. 1.0 W, max. 3.0 W	UMTS/HSPA frequencies (3G)	900, 1800 MHz (U300)
Level inputs	HIGH level = 3 ... 12 V LOW level = 0 ... 1 V Contact open condition: HIGH	Real-time clock (RTC) buffer time	850, 1900 MHz (U310)
Current consumption input at LOW potential	max. 0.5 mA when connecting to GND	Temperature range	900, 2100 MHz (U300)
Digital output (changeover relay), max. switch voltage	30 V (AC/DC)	Maximum permissible humidity	850, 1900 MHz (U310)
Digital output (changeover relay), max. current load	1 A (DC) / 0.5 A (AC) (resistive load)	IP rating	typ. 2 days
			-30 °C ... 70 °C (80 °C restricted)
			95% non-condensing
			Housing IP40
			Connectors IP20

A

Router connection

1. Connect antenna
2. Insert SIM card (**no** power supply must be connected!)
3. Connect supply voltage (12 V ... 24 V DC ($\pm 20\%$)) to the terminals 12...24 V and GND
4. Connect router (LAN) to the configuration PC via Ethernet cable



B

LAN settings of configurations PC (Windows 7)

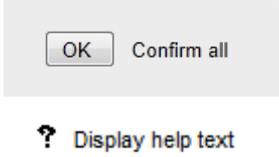
- ① If a DHCP client is active on the PC, proceed with step C. Otherwise, either enable the DHCP client or configure a static IP address.
5. Open Network and Sharing Center (e.g.  key and search for "sharing")
6. Select LAN connection and Properties
7. Select Internet Protocol Version 4 (TCP/IP) and Properties

<p>Enable DHCP client</p> <ol style="list-style-type: none">8. Obtain an IP address automatically① It is recommended to unplug the network cable briefly and plug it again upon activation of the DHCP client.	<p>Configure a static IP address</p> <p>Use the following IP address (example):</p> <p>IP address: 192 . 168 . 1 . 2</p> <p>Subnet mask: 255 . 255 . 255 . 0</p> <p>Standard gateway 192 . 168 . 1 . 1</p> <p>Preferred DNS server: 192 . 168 . 1 . 1</p> ① Please note the previous values before changing the TCP/IP settings to be able to restore them later.
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C

Web interface access

9. Enter IP address of the router in address bar of the browser (default: **192.168.1.1**)
- ① If a proxy server is enabled in your browser, this must be disabled or the IP address of the router must be added as exception.
10. Login with User name (default: **insys**) and Password (**icom**)
- ① All modified data will only be transmitted to the router after clicking the OK button.
- ① Refer to the header and display the help text to get helpful information about the individual parameters in the web interface.



Configuration as Internet Router

D

- ① If the router is in delivery state or has been reset to factory defaults, the configuration option Fast start after reset to default settings appears upon login.
- 11. Enter PIN of the SIM card
- 12. Enter User name and Password for authentication with the provider (must not be empty)
- 13. Enter Access Point Name (APN)
- ① These data can be found in the contract documents of your SIM card or can be requested from the provider. The APNs of popular providers can be displayed by clicking on ?.
- ① Customer name and device code must only be entered, if the router is to be configured for the **icom Connectivity Suite - VPN** (<https://connectivity.insys-icom.de>).
- 14. Confirm settings with OK
- ① The COM LED is illuminated **green** during connection establishment and **orange** as soon as an Internet connection is established. If a connection to the **icom Connectivity Suite - VPN** is configured, the Status LED will light up **green** as soon as it is established.

Quick start with factory settings

PIN	<input type="text"/>
Dial-Out Caller number	*99***1#
User name	user
Password	password
Access Point Name	<input type="text"/> ?

Configuration of access data

E

- ① User name and password for web interface access must be changed to prevent a manipulation of the configuration by unauthorised persons.
- 15. Menu Basic Settings > Web interface: Enter user name and password for authentication with password
- 16. Confirm settings with OK
- ① A typo during entering or forgetting the configured access data makes the router inaccessible until resetting it to default settings.

All essential configuration steps are completed with this. Further configuration depends on your specific application. Other frequently required settings are available on the following page.

IP Address in Local Network

- ① The IP address of the router in the local network does only have to be changed, if the IP address is already used or a different address range is required.
- 1. Menu Basic Settings > IP address (LAN): Adjust IP address of the router in local network
- 2. Confirm settings with OK
- 3. Adjust IP settings of the PC for further configuration accordingly, if these are not obtained automatically (see step B)
- 4. Menu Server services > DHCP: Adjust address range to the local IP network, if it was not possible to adjust this automatically

Resetting the router

- ① If it is necessary to reset the router during configuration, this is possible without losing the settings.
- 1. Menu System > Reset: Select Reset
- 2. Confirm settings with OK
- ▶ Alternatively, press reset key on the device front once for a short time (soft reset)

Resetting the router to default settings

- ① If the router is to be reset to default settings (if the router has already been used for example), it can be reset to delivery state.
- 1. Menu System > Reset: Select Load default configuration and reset
- 2. Confirm settings with OK
- ▶ Alternatively, press reset key on the device front three times for a short time within 2 seconds

Resetting and initialising the router

- ① If the router is not available any more for any reason, it can be reset and initialised (settings do not get lost).
- 1. Press reset key on the device front for at least 3 seconds (hard reset)



Configuration Guides and manuals for integrating your product into your application are available in the menu Support and Downloads
<http://www.insys-icom.com/support>



For interesting information about your product refer to our website in the menu Knowledge Base
<http://www.insys-icom.com/knowledge>

Hereby, INSYS Microelectronics GmbH declares that herein described device types are in compliance with Directives 2014/53/EU and 2011/65/EU. The full text of the EC Declaration of Conformity is available under www.insys-icom.com/manual.