

2N[®] EasyGate IP User Manual



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1. Product Description

In this section, we introduce the **2N® EasyGate IP** product, outline its application options and highlight the advantages following from its use. The section also includes safety precautions.

Here is what you can find in this section:

- [1.1 Product Description](#)
- [1.2 Components and Associated Products](#)
- [1.3 Terms and Symbols Used](#)

1.1 Product Description



2N® EasyGate IP is designed primarily for voice transmission over VoIP (or VoLTE, GSM, UMTS) between a mobile network and a connected FXO-equipped terminal (PBX, phone, lift communicator, answering machine, etc.). When connected to the 2N® Elevator center cloud service, the gateway shows an extended functionality including remote management, auto provisioning, real-time device state monitoring and others.

Basic Functions:


- Calling (VoIP, VoLTE, CS calls)
- Data transmission
- Autonomous battery operation
- Remote management via 2N® Elevator Center
 - automatic configuration
 - bulk update
 - bulk configuration

- sending notifications by e-mail
- remote access
- real-time monitoring





✓ **Tip**




If you do not use the data services provided by this gateway (i.e. Elevator Center cloud or VoIP calls), we recommend that you deactivate the data services on the SIM card used.



1.2 Components and Associated Products

Main Units		
	<p>Part No. 5023001E, 5023001US, 5023001AU</p>	<ul style="list-style-type: none"> • 2N® EasyGate IP Lift, LTE, VoIP, FXS port, Aku+, 100-240V/1A E/US/AU, with cable (no plug) • IP gateway for voice transmission with FXS interface • with module EC21-E/A/AU
	<p>Part No. 5023011E, 5023011US, 5023011AU</p>	<ul style="list-style-type: none"> • 2N® EasyGate IP LTE, VoIP, FXS port, Aku+, 100-240V/1A E/US/AU, with cable (no plug) • IP gateway for voice transmission with FXS interface • with module EC21-E/A/AU
	<p>Part No. 5023101E, 5023101US, 5023101AU</p>	<ul style="list-style-type: none"> • 2N® EasyGate IP Lift, LTE, VoIP, FXS port, modem, Aku+, 100-240V/1A E/US/AU, with cable (no plug) • IP gateway for voice transmission with FXS interface • with module EC21-E/A/AU
	<p>Part No. 5023111E, 5023111US, 5023111AU</p>	<ul style="list-style-type: none"> • 2N® EasyGate IP LTE, VoIP, FXS port, modem, Aku+, 100-240V/1A E/US/AU, with cable (no plug) • IP gateway for voice transmission with FXS interface • with module EC21-E/A/AU

Main Units		
	<p>Part No. 5023201US</p>	<ul style="list-style-type: none"> • 2N® EasyGate IP Lift, LTE, VoIP, FXS port, Aku+, 100-240V/1A, with cable (no plug) • IP gateway for voice transmission with FXS interface • with module EC25AFFA
	<p>Part No. 5023202US</p>	<ul style="list-style-type: none"> • 2N® EasyGate IP LTE, VoIP, FXS port, Aku+, 100-240V/1A, with cable (no plug) IP • gateway for voice transmission with FXS interface • with module EC25AFFA

Accessories	
<p>Part No. 5029001</p> 	<ul style="list-style-type: none">• 2N® EasyGate IP – RJ11 to FXS adapter• reduction RJ11 / FXS
<p>Part No. 5029003E</p> 	<ul style="list-style-type: none">• Power Cable Adapter with EU plug• 1.8 m length
<p>Part No. 5029003UK</p> 	<ul style="list-style-type: none">• Power Cable Adapter with UK plug• 1.8 m length
<p>Part No. 5029003US</p> 	<ul style="list-style-type: none">• Power Cable Adapter with US Plug• 1.8 m length

Accessories	
<p>Part No. 5029003AU</p> 	<ul style="list-style-type: none"> • Power Cable Adapter with AU plug • 1.8 m length
<p>Part No. 22041579</p> 	<ul style="list-style-type: none"> • GSM/UMTS/LTE Antenna • SMA connector, 10m cable • 9 dB, for higher signal quality
<p>Part No. 5029010</p> 	<ul style="list-style-type: none"> • Emergency Lighting Accessories • Provides connection of an external emergency lighting system to the lift cabin at power outages. • Fed from 2N® EasyGate IP backup batteries. • Supports emergency lighting of up to 12 V / 0.1 A.
Management Services	
<p>Part No. 9137991</p>	<ul style="list-style-type: none"> • 2N® Elevator Center device fee • Cloud service license for lift bulk management

Associated Devices		
<p>Part No. 919640</p>		<ul style="list-style-type: none"> • Lift1 – cabin audio unit <ul style="list-style-type: none"> • Basic model (fully extendable) • Provides automatic dialing of up to six numbers • Factory default announcements are played back • Lift identification message customization option
<p>Part No. 919640X</p>		<ul style="list-style-type: none"> • Same as 919640 + (includes LED, microphone a speaker connected via cables)
<p>Part No. 919618</p>		<ul style="list-style-type: none"> • Same as 919640 + stainless steel cover plate
<p>Part No. 919645</p>		<ul style="list-style-type: none"> • 2N® Lift1 Compact <ul style="list-style-type: none"> • Basic model • Provides automatic dialing of up to six numbers • Factory default announcements are played back • Lift identification message customization option

1.3 Terms and Symbols Used

The following symbols and pictograms are used in the manual:

⚠ Safety

- **Always abide** by this information to prevent persons from injury.

⚠ Warning

- **Always abide** by this information to prevent damage to the device.

 **Caution**

- **Important information** for system functionality.

 **Tip**

- **Useful information** for quick and efficient functionality.

 **Note**

- Routines or advice for efficient use of the device.

2. Device Installation

This section describes the **2N® EasyGate IP product** and its installation. Here is what you can find in this section:

- [2.1 Before You Start](#)
- [2.2 Mechanical Installation:](#)
- [2.3 Electric Installation](#)
- [2.4 Overview of Connectors](#)
- [2.5 Overview of LED Indicators](#)
- [2.6 RESET Button Function](#)
- [2.7 Connection of Extending Modules](#)

2.1 Before You Start

Product Completeness Check

Before starting the installation, check whether the **2N® EasyGate IP** package includes all the items listed below:

1x	2N® EasyGate IP product
1x	1x wall / DIN rail bracket
2x	Dowel (6 mm) with screws (4.5 x 40 mm)
1x	Screw for fitting the device in the holder
1x	Antenna
1x	FXS cable
1x	Power supply
1x	Brief Manual
4x	NiMH type AA, 1.2 V / min. 2000 mAh battery
1x	2-pin terminal
1x	3-pin terminal

Installation Conditions

- **2N® EasyGate IP** should be installed in a lockable room so that the potential risk of unauthorized access and misuse by unauthorized persons can be minimized.
- **2N® EasyGate IP** is designed for vertical mounting.
- Install **2N® EasyGate IP** with respect to the signal strength – check the LED indicator status or display the information in the device web interface.
- No strong electromagnetic radiance is allowed on the installation site. The installed device is intended for permanent operation with the minimum separation distance of 20 cm from the user.
- For the allowed range of operating temperatures refer to Section 7. [Technical Parameters](#).
- **2N® EasyGate IP** may not be operated on sites exposed to direct solar radiation or near heat sources.
- **2N® EasyGate IP** is designed for indoor use. It may not be exposed to rain, flowing water, condensing moisture, fog, etc.
- **2N® EasyGate IP** may not be exposed to aggressive gas, acid vapors, solvents, etc.
- **2N® EasyGate IP** is not designed for environments with high vibrations such as means of transport etc.
- Make sure there is enough free space above and under **2N® EasyGate IP** for cabling and flowing air to conduct heat away.
- An improper placing of **2N® EasyGate IP** or the antenna near television, broadcasting or other high-frequency sensitive devices may have an adverse affect on their functionalities.

Caution

- Make sure that you have all equipment necessary for putting **2N® EasyGate IP** in operation (SIM card, analog phone or PBX FXO port or USB-C cable for device-PC interconnection).

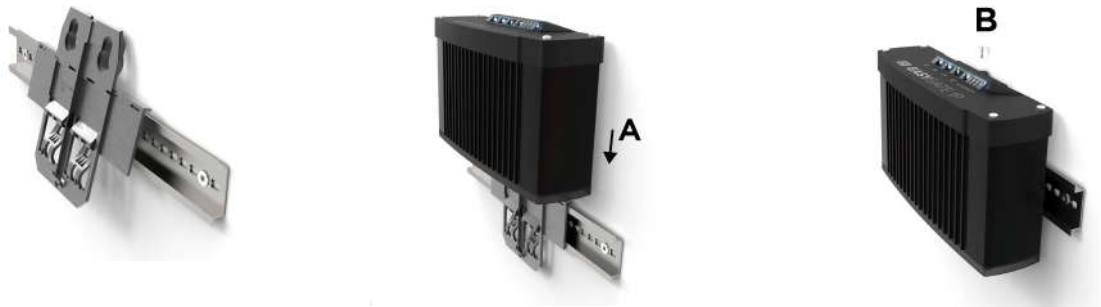
Warning

- Only vertical mounting with the connectors heading down guarantees that the device is waterproof. If installed otherwise, the device may be infiltrated with water and damaged irreversibly!!!

2.2 Mechanical Installation:

2N® EasyGate IP is designed for mounting on a vertical surface using a DIN rail bracket (35 mm) or a wall bracket using screws fitted to the bracket mounting holes.

DIN Rail Mounting



No other tool is needed for DIN rail installation. The DIN rail bracket has a standard size of 35 mm. Put the upper inner side of the bracket profile on the DIN rail and push its bottom side to make the bracket click and fit to the DIN rail. Now all you have to do is slide **2N® EasyGate IP** from the top into the bracket profile (A) and fit its position with a screw (B).

Wall Installation

Use the bracket and two dowels with screws included in the package to install **2N® EasyGate IP** on a wall. Drill holes in a selected place and selected height of the wall and insert the dowels. Pass the screws through the bracket holes and screw them into the dowels in the wall. Now all you have to do is slide **2N® EasyGate IP** from the top into the bracket profile (A) and fit its position with a screw (B).

2.3 Electric Installation

2N® EasyGate IP consists of a VoIP gateway in a black case, removable antenna and phone / PC / power supply connecting cables.

To put **2N® EasyGate IP** in operation, connect the device to the power supply, connect an external antenna and insert the SIM card.

Device Connection to Power

Connect the supplied power terminals to the POWER connector, connect the power supply to the mains. The device activity is signaled by status LED indicators. Refer to [Subsection 2.5 Overview of LED Indicators](#) for details. **2N® EasyGate IP** is fed with DC 9–30 V / 1 A via a supply cable. Where a source other than the included power supply is used, the allowed voltage range and polarity have to be maintained according to the technical parameters. AA batteries with the minimum contact height of 1.7 mm are only recommended.

In the case of a power failure, four NiMH size AA (1.2 V / min. 2000 mAh) batteries inside the device provide power backup and thus normal operation of the device. As part of the device, this

battery pack is placed on the bracket bottom side and covered with a plate fitted with a screw. The cell polarity is indicated next to the battery pack space.

Use the O/I switch on the bottom side to turn the device off. By disconnecting the power supply you do not turn the device off but redirect the operation to the back battery source.

Tip

- We recommend that the Panasonic HHR-210AAB batteries included in the product delivery are used for power backup.

Caution

- Upon the first **2N® EasyGate IP** start or factory reset, a few successive restarts may occur during which VoLTE profile is set on the device module.

Caution

- **2N® EasyGate IP** may not work properly if an adapter with incorrect values is used. An error-free operation of **2N® EasyGate IP** is ensured only if an adapter supplied by 2N is used. If other adapters are used, 2N cannot guarantee error-free operation of the device.
- Make sure that the power distribution network voltage matches the data provided on the power supply adapter label before connecting the device to the electric mains.
- Whenever the power supply is disconnected or fails, power is automatically taken from the backup batteries.

 **Warning**

- The device may be operated in a temperature range of 0 °C – 50 °C if equipped with the provided batteries, or at temperatures outside this range without these batteries. Remember to use batteries with increased thermal resistance in order to make the backup function work. You can connect an external battery with increased thermal resistance or use an external battery placed under convenient temperature conditions.
- Use only the recommended NiMH AA battery type for backup. These storage batteries are the only ones approved for use! **If other batteries are used, there is a danger of device damage or even explosion!**
- **At the end of service life, the batteries must be disposed of as hazardous waste in accordance with the local regulations.**

Antenna Connection

Screw the enclosed antenna into the SMA antenna connector. Tighten the antenna connector gently with your hand, never use a wrench!

SIM Card Installation

Insert a SIM card (Mini SIM size) into one of the SIM slots on the device bottom side. Push the SIM card to fix its position in the SIM slot. A properly inserted SIM card sticks out slightly from the slot. Check whether the SIM card has been inserted properly by examining its outline above the slot. The other slot is used for insertion of a backup SIM card. To remove the SIM card, push the SIM card again to loosen it, slide out a little and make it ready for removal.

Remember to set provider services such as call forwarding, call barring, preferred networks, SMS center, etc. in your mobile phone, for example, before inserting the SIM card in **2N® EasyGate IP**. Unlock the SIM card by entering the PIN on the appropriate SIM card in the Network configuration section (refer to [5.2.1 SIM1](#) and [5.2.2 SIM2](#)).

 **Caution**

Verify your provider's SIM card settings too to make **2N® EasyGate IP** work properly.

Phone Terminal Connection

In addition to an emergency intercom, **2N® EasyGate IP** can be connected to any standard phone, answering machine or other terminal equipment equipped with an FXO interface.

PBX Connection

Connect **2N® EasyGate IP** to an unused line of your PBX (FXO). Configure the PBX in such a manner that the outgoing GSM calls are routed to **2N® EasyGate IP**.

2.4 Overview of Connectors






Connector Layout and Meanings	
FXS	Analog line
RELAY	Relay (refer to 5.7 Services / Signaling) <ul style="list-style-type: none"> • NO (Normally Open): contact that is open against the COM contact at relax. The relay is not activated. • COM: contact that switches between NO and NC after voltage is applied to the coil. • NC (Normally Closed): contact that is connected with the COM contact at relax. The relay is activated.
INPUT	Shorting input. Not used for voltage connection.
RS232	Used for connecting the device with the serial bus (in some controller types, e.g.). <ul style="list-style-type: none"> • TX: output from 2N® EasyGate IP. • RX: input to 2N® EasyGate IP. • GND: grounding.


RESET	A short press restarts the device. A long press (20 s) resets the device factory values.
USB	Used for local access to the web interface settings via the 2N® EasyGate IP – 2N Web Configuration Utility .
SIM1	Primary SIM card slot.
ANTENNA CONNECTOR	SMA antenna connector. For US version support there are two antenna connectors.
SIM2	Secondary SIM card slot for primary SIM backup at signal loss.
POWER	Power supply connector.
EXT BATTERY	Connector for remote connection of 4 external NiMH batteries outside the device. Power is withdrawn from the external battery automatically in the case of an electrical power failure. Make sure that the internal batteries are removed before connecting external batteries!
O/I	Device on/off switch.












2.5 Overview of LED Indicators

The status of **2N EasyGate IP** is signaled by the LED indicators on the device upper side. Refer to the table below for the statuses.

LED Indicators	
 Power supply	<ul style="list-style-type: none"> • Blue – mains power
	<ul style="list-style-type: none"> • Blue/green flashing for 1.8 s, followed by 0.2s pause – problem with 2N Lift1 setup
	<ul style="list-style-type: none"> • Red – HW error <p>When an HW error is indicated by a red LED, request rectification or compensation from your distributor.</p>
	<ul style="list-style-type: none"> • Green – battery power
	<ul style="list-style-type: none"> • Yellow – battery removal required, two-year life exceeded

	<ul style="list-style-type: none"> • Yellow flashing once in 1 s (0.5 s/0.5 s) – battery error
 <p>Network</p>	<ul style="list-style-type: none"> • No light – device off • Blue – primary SIM card used • Yellow – secondary SIM card used <p>Function:</p> <ul style="list-style-type: none"> • Light on – connected to network • Flashing once in 1 s – disconnected from network, SIM card detected • Flashing once in 3 s – disconnected from network, no response from SIM • Flashing 4 times in 1 s, followed by 1s pause – PIN is required for access to SIM card • Flashing 8 times, followed by 1s pause – inserted SIM is locked, enter PUK to unlock it • Continuous flashing – two unsuccessful PIN entering attempts. 2N EasyGate IP does not allow another attempt to avoid SIM card blocking. <div style="border: 1px solid green; padding: 5px; margin-top: 10px;"> <p>✓ Tip</p> <ul style="list-style-type: none"> • You can use your mobile phone for another entering of the PIN code. </div>
 <p>Line</p>	<ul style="list-style-type: none"> • Blue – SIP call • Green – VoLTE call • Yellow – call via a mobile voice channel

	<ul style="list-style-type: none"> • White – programming, sending information to 2N Lift1, modem connection.
	<p>Function:</p>
	<ul style="list-style-type: none"> • No light – on-hook
	<ul style="list-style-type: none"> • Flashing once in 1 s – on-hook, dialing / incoming call (ringing) in progress
	<ul style="list-style-type: none"> • Light on – active call
 <p>Data</p>	<ul style="list-style-type: none"> • No light – no IP address assigned (check SIM settings) • Blue – data available, device added to 2N Elevator Center account, SIP registered • Blue 0.25 s, pause 2.5 s – IP address assigned, data unavailable (check device APN settings or provider’s data availability) • Blue 0.5 s/0.5 s – data available, 2N Elevator Center disabled or device not added to EC account, SIP not registered • Blue twice in 2.75 s (0.25 s/0.25 s, pause 2 s) – data available, device added to 2N Elevator Center account, SIP registration in progress, but SIP not registered (check SIP settings) • Yellow – data available, device added to 2N Elevator Center account, SIP not registered • Green – data available, 2N Elevator Center disabled or device not added to 2N Elevator Center account, SIP registered


	<ul style="list-style-type: none"> Green twice in 2.75 s (0.25 s/0.25 s) – data available, 2N Elevator Center disabled or device not added to 2N Elevator Center account, SIP registration in progress, but SIP not registered (check SIP settings) 						
 <p>Signal</p>	<p>Indication of signal strength (LED count) and used technology (first LED color)</p> <ul style="list-style-type: none"> Yellow – 2G (-104, -98, -89, -80 dB) Green – 3G (-106, -100, -90, -80 dB) Blue – 4 G (-100, -90, -80, -70 dB) <p>The signal LED indicators  also indicate such action statuses as:</p> <table border="1" data-bbox="419 835 1425 1025"> <thead> <tr> <th data-bbox="419 835 740 902">factory reset</th> <th data-bbox="740 835 1078 902">software restart</th> <th data-bbox="1078 835 1425 902">firmware upgrade</th> </tr> </thead> <tbody> <tr> <td data-bbox="419 902 740 1025">  </td> <td data-bbox="740 902 1078 1025">  </td> <td data-bbox="1078 902 1425 1025">  </td> </tr> </tbody> </table>	factory reset	software restart	firmware upgrade			
factory reset	software restart	firmware upgrade					
							

2.6 RESET Button Function

The RESET button located on the **2N® EasyGate IP** bottom side is used for factory default reset or restart of the device.

Factory Default Reset

To reset the factory default values, press and hold the RESET button for approximately 20 seconds until the separate red LED indicator in position 1 among the signal LEDs goes on.

 Now release the RESET button to reset the factory default values. While the RESET button is being pressed, the blue power LED indicator is on.

Restart

To HW restart the device, press the RESET button shortly. The power LED flashes shortly to signal the button press.

2.7 Connection of Extending Modules

Emergency Lighting Accessories

The **emergency lighting accessories** help you connect an external emergency lighting system to the lift cabin. The external emergency lights turn on whenever a mains voltage failure occurs. In this moment, they are fed from the **2N® EasyGate IP** backup batteries. The accessories support the emergency lighting connection up to 12 V / 0.1 A.

Connection instructions

- Open the plastic cover of the accessories. Connect the external emergency lighting system to the OUT terminal. Keep the polarity. Replace the plastic cover.
- Connect the terminal with the 2-wire leading from the accessories to the EXT BATT connector on the **2N® EasyGate IP** backside.
- Connect the red wire from the accessories to the positive (+) pole of the power supply terminal on the **2N® EasyGate IP** backside.

Caution

- The red wire connection prevents the lighting up of the emergency lights while **2N® EasyGate IP** is fed from the power supply. This avoids discharging of the batteries that back up **2N® EasyGate IP** at power outages.

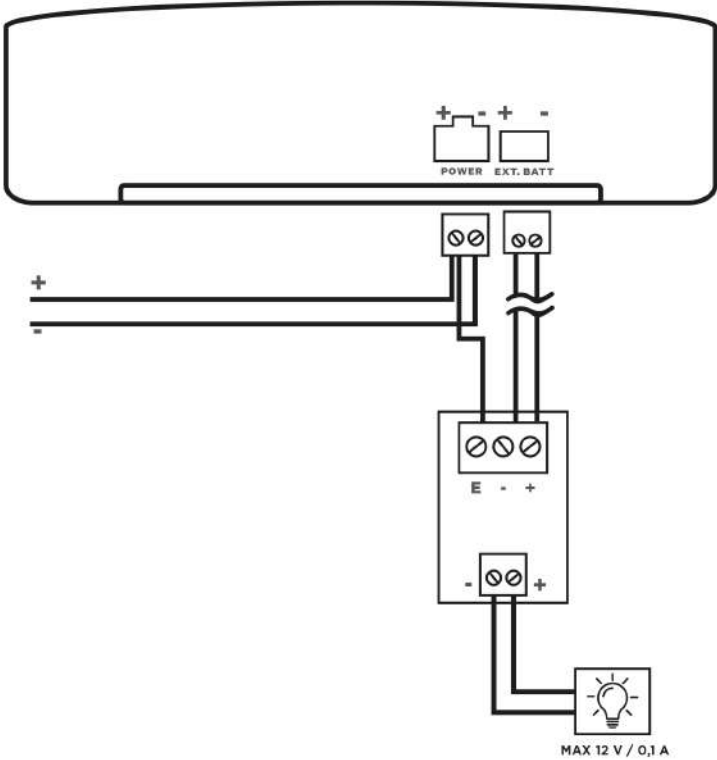


Figure: Wiring Diagram

3. Phone Line Tones – Operational Tones

2N® EasyGate IP sends tones to the phone line that indicate its operational status. Refer to the list below for behavior at factory default values. The tone frequency is 425 Hz.

- **Dial tone**

Continuous tone or as configured.

The tone sounds when the line is seized indicating that **2N® EasyGate IP** is capable of making a call/modem connection.

- **Ringing tone**

 or as configured.

The tone is played by **2N® EasyGate IP** whenever a call is made to the device.

- **Busy tone**

 or as configured

The tone is transmitted whenever:

- the called user is busy,
- the called user has hung up (call clearing).

 **Tip**

- Configure the operational tones on the Telephony card (refer to [5.6 Telephony / Dialing](#)).

Factory Default Values of Operational Tones

E Versions

(Part Nos. 5023001E, 5023011E, 5023101E, 5023111E)

	Dial Tone	Busy Tone	Continuous Tone	Ring
Frequency 1 [Hz]	425	425	425	50
Frequency 2 [Hz]	0	0	0	–
Modulation [ms/ms]	continuous	330/330	–	2000/4000

US Versions

(Part Nos. 5023001US, 5023011US, 5023101US, 5023111US, 5023201US, 5023202US)

	Dial Tone	Busy Tone	Continuous Tone	Ring
Frequency 1 [Hz]	350	480	420	25
Frequency 2 [Hz]	0	620	0	–
Modulation [ms/ms]	continuous	375/375	–	2000/4000

AU Versions

(Part Nos. 5023001AU, 5023011AU, 5023101AU, 5023111AU)

	Dial Tone	Busy Tone	Continuous Tone	Ring
Frequency 1 [Hz]	413	400	425	25
Frequency 2 [Hz]	438	400	0	–
Modulation [ms/ms]	continuous	250/250	–	2000/4000

4. Web Interface Login

There are two login options for **2N® EasyGate IP**, refer to the subsections below:

- [4.1. 2N® Elevator Center](#)
- [4.2 2N® EasyGate IP – Web Configuration Utility](#)

4.1. 2N® Elevator Center

2N® Elevator Center, a licensed cloud service, is used for **2N® EasyGate IP** remote management and web interface access. Contact your 2N distributor for the service access data. The user account will be blocked for a minute following the third unsuccessful login attempt.

Caution

- We recommend that the **2N® Elevator Center** cloud service is used for device security and data protection.
- Never provide the **2N® Elevator Center** login data to other persons or services. Keep this information safe and do not enter it on unreliable web pages.

4.2 2N® EasyGate IP – Web Configuration Utility

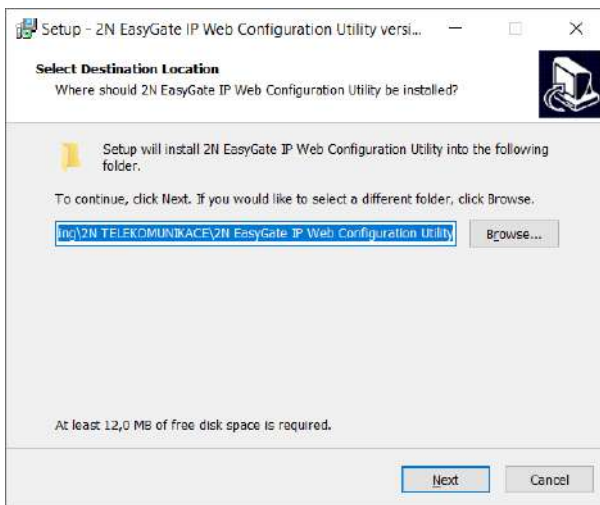
To configure **2N® EasyGate IP** without the **2N® Elevator Center** cloud service, connect the device to a PC via a USB cable using the **2N® EasyGate – Web Configuration Utility**, available for free download at 2n.com. **2N® EasyGate IP – Web Configuration Utility** is used for automatic opening of the **2N® EasyGate IP** web configuration page, which is connected via a local USB port.

Caution

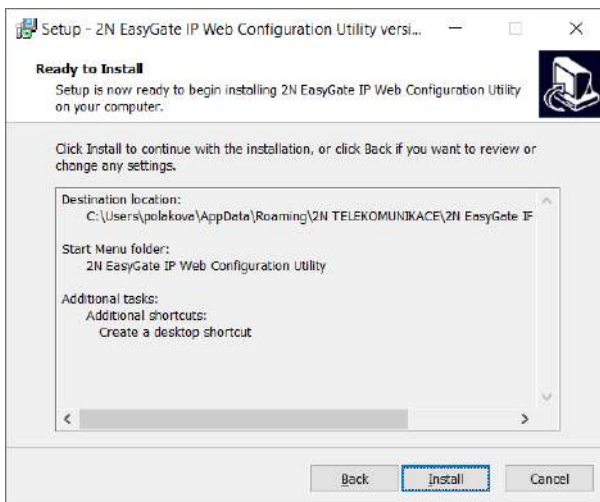
- Just a single active USB connection is supported. If multiple devices are connected, keep just one **2N® EasyGate IP** connected.

Installation

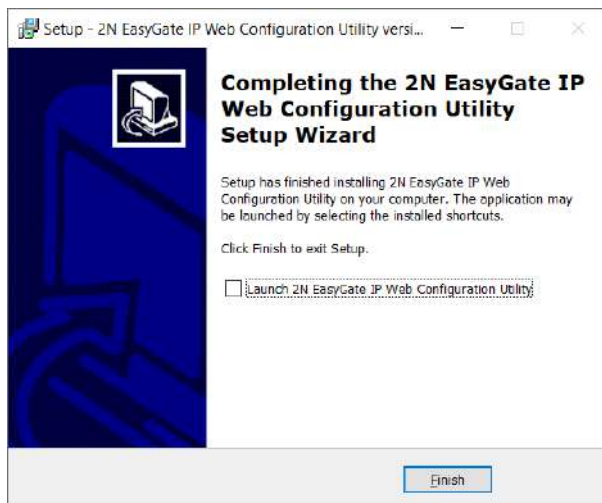
- Double click to start the `2N_EasyGate_IP_Web_Configuration_UTILITY_Setup (.exe)` file.



- Select the target folder for the utility installation.
- Select Start Menu (optional).
- Select other available tasks – create a shortcut icon (optional).



- Confirm the installation.



- Click Finish to complete the installation.

Use

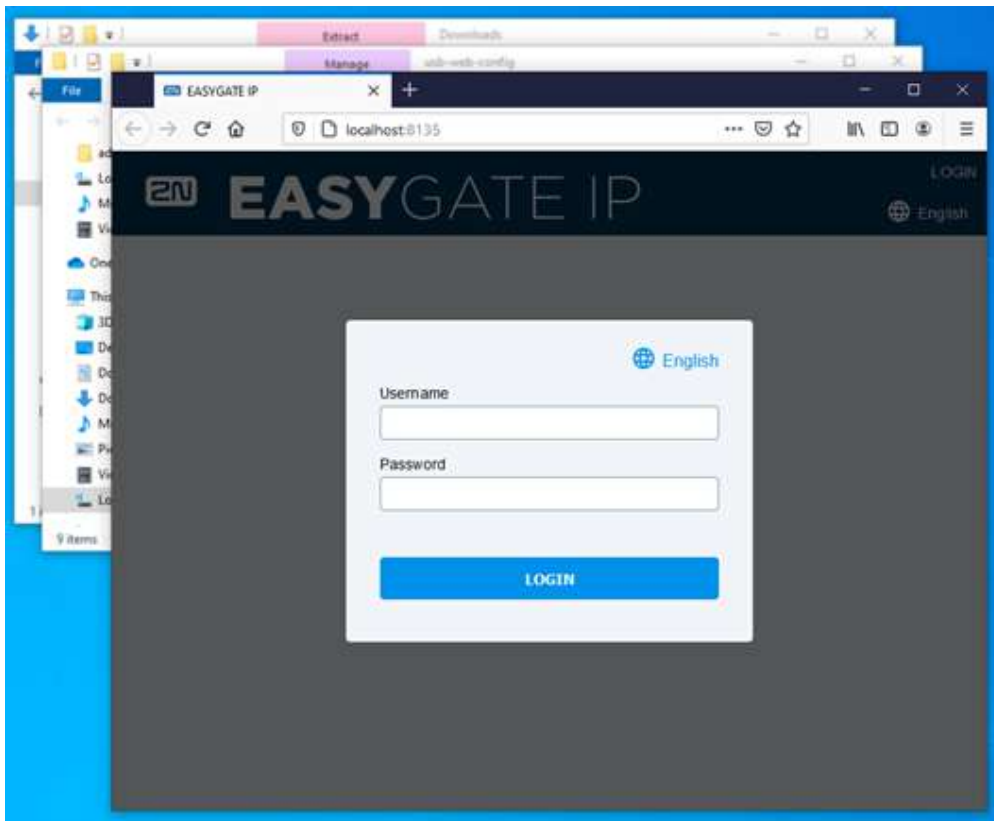
- Connect the adapter to **2N® EasyGate IP**.
- Turn on **2N® EasyGate IP**.
- Connect **2N® EasyGate IP** to a PC using a USB (USB-A / USB-C) cable.

Warning

- Make sure that the USB connection option is enabled, refer to [5.8.4 System](#). Once the device is added to **2N® Elevator Center**, the USB connection is automatically disabled.

- Open the installed application 2N EasyGate IP Web Configuration Utility.

If **2N® EasyGate IP** is already connected via USB, its web page will be displayed automatically:



If **2N® EasyGate IP** is disconnected at this moment, nothing will happen. To reopen the configuration web page after USB reconnection or **2N® EasyGate IP** restart, for example, close and restart the 2N EasyGate IP software.

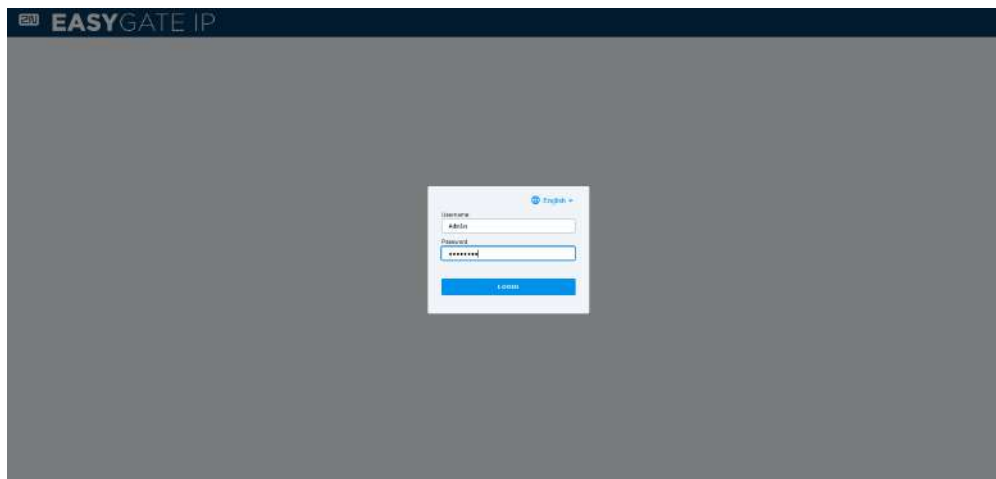
For the first login, enter **Admin** (or **admin**) as the user name and **2n** as the password. You will be prompted to change the default password upon your web interface login to be able to edit configuration. The user account will be blocked for a minute following the third unsuccessful login attempt.

⚠ Password Change

- Make sure that your password has 8 characters at least including one lower-case letter, one upper-case letter and one digit.
- A password change will be requested upon the main unit factory default reset.

5. Configuration

The following subsections describe the programmable parameters and functions of **2N® EasyGate IP**. Every configuration change requires saving or device restart. The fields with invalid values are marked red. Changes with invalid values cannot be saved. No change will be set without saving.

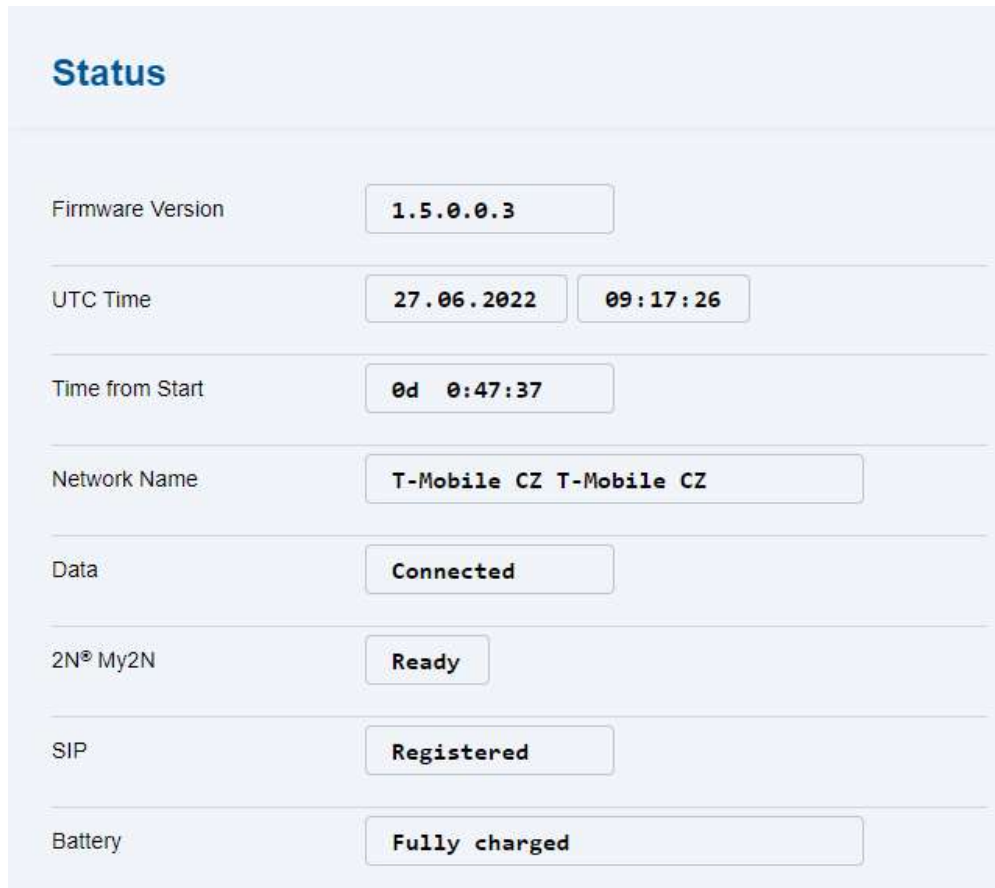


- 5.1 Status
 - 5.1.1 LED
- 5.2 Network
 - 5.2.1 SIM1
 - 5.2.2 SIM2
 - 5.2.3 VoLTE
 - 5.2.3.1 DTMF
 - 5.2.4 WWAN
 - 5.2.4.1 Operator
 - 5.2.4.2 Data Connection
 - 5.2.4.3 Backup
 - 5.2.4.4 Ping
 - 5.2.4.4.1 Primary
 - 5.2.4.4.2 Backup
- 5.3 My2N / Basic Settings
 - 5.3.1 2N® My2N Security
- 5.4 SIP / Basic Setup
 - 5.4.1 SIP Security
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- 5.5 NTP
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 - 5.6.1 Info
 - 5.6.2 Battery Status
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- 5.6.4 Password
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- 5.7 SMS / Setting
 - 5.7.1 Commands
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 - 5.7.3 Digital Input
- 5.8 Telephony / Dialing
 - 5.8.1 Babycall
 - 5.8.2 Pulse Dialing
 - 5.8.3 Dial Tone
 - 5.8.4 Busy Tone
 - 5.8.5 Continuous Tone
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- 5.9 Services / Signaling
 - 5.9.1 Modem via TCP
 - 5.9.1.1 TCP
 - 5.9.1.2 Modem
 - 5.9.2 RS-232 via TCP
 - 5.9.2.1 TCP
 - 5.9.2.2 RS-232
- 5.10 Maintenance / Configuration
 - 5.10.1 Firmware
 - 5.10.1.1 Detail
 - 5.10.2 Batteries
 - 5.10.3 Temperature Monitor
 - 5.10.4 System
 - 5.10.5 Soft modem
 - 5.10.6 Logs
 - 5.10.6.1 Logcat
 - 5.10.6.2 Diagnostics
- 5.11 Tester
 - 5.11.1 I/O
 - 5.11.2 LED
 - 5.11.3 Test Call

5.1 Status

The Status folder is also used as the home page after the **2N® EasyGate IP** web interface login. There is a list of 8 configurable sections to the left. Page refresh, language/password change and web interface logout can be found in the right-hand upper corner.



Status	
Firmware Version	1.5.0.0.3
UTC Time	27.06.2022 09:17:26
Time from Start	0d 0:47:37
Network Name	T-Mobile CZ T-Mobile CZ
Data	Connected
2N® My2N	Ready
SIP	Registered
Battery	Fully charged

The **Status** menu clearly shows all current information on the device.

- **Firmware version** – gives the firmware version uploaded to the device.
- **UTC** – current time for the installation site.
- **Uptime** – device operation time.
- **Network name** – active SIM card provider's network name.
- **Data** – information on data connection availability (connected, disconnected, SIM error).

 **Caution**

- Data Connected can be displayed in some mobile providers even in case the APN field is not completed and the Internet does not work.
- In case the APN is completed incorrectly, Data Disconnected will be displayed and **2N® EasyGate IP** will be restarted automatically in aprox. 5 minutes.

- **My2N** – information on My2N connection.
- **SIP** – information on SIP connection.
- **Battery status** – battery status.

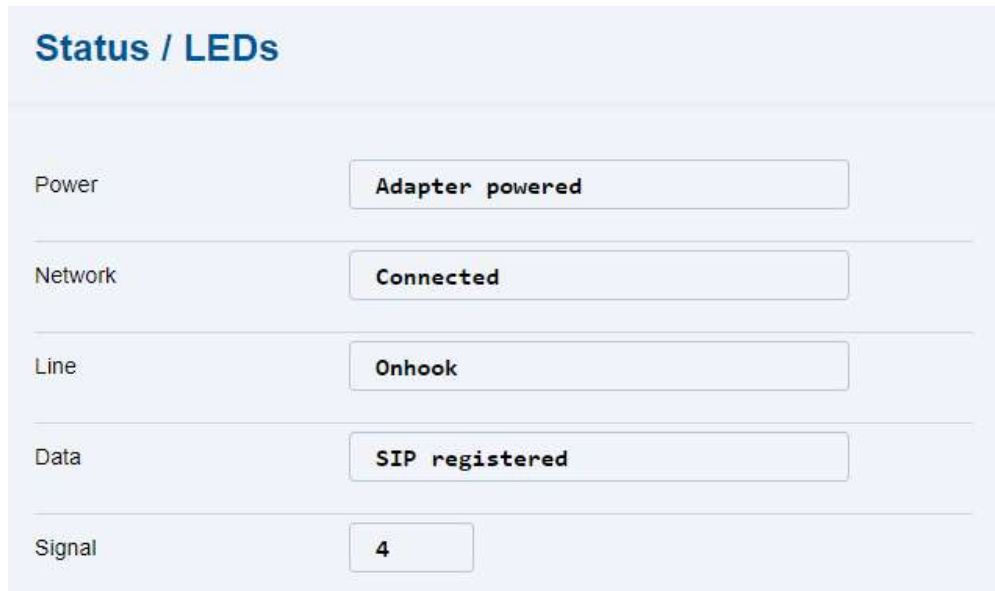
 **SIM Error**

- SIM Error is displayed whenever a SIM card is not inserted properly or the inserted SIM card requires a PIN code. If the data status reports disconnected, it probably means that the SIM card data credit has been exhausted.

- [5.1.1 LED](#)

5.1.1 LED

The LED menu informs about the status of the device LED indicators and is used for remote control where the device cannot be checked physically. Refer to [2.5 Overview of LED Indicators](#) for LED indicator details.



The screenshot shows a web interface titled "Status / LEDs". It contains five rows, each with a label on the left and a status box on the right:

Category	Status
Power	Adapter powered
Network	Connected
Line	Onhook
Data	SIP registered
Signal	4

- **Power** – information on the device power supply.
- **Network** – information on the mobile network status.
- **Line** – information on the line status / active call technology.
- **Data** – information on the data connectivity / SIP registration / My2N connection statuses.
- **Signal** – information on the signal intensity level (1–4).

5.2 Network

- [5.2.1 SIM1](#)
- [5.2.2 SIM2](#)
- [5.2.3 VoLTE](#)
- [5.2.4 WWAN](#)

5.2.1 SIM1

This folder helps you set the SIM card inserted in SIM1, activate the card and set the Provider APN parameter. SIM1 is used for the primary SIM card.

Network / SIM1

SIM Slot	<input type="text" value="Enabled"/>
PIN	<input type="text"/>
APN	<input type="text" value="internet.t-mobile.cz"/>
Authentication Type	<input type="text" value="None"/>
Username	<input type="text"/>
Password	<input type="text"/> <small>Max Length: 63 characters</small>

- **SIM slot** – enable/disable the SIM card function.
- **PIN** – PIN code to the secured SIM card.
- **APN** – parameter for Internet access setting. Check the correct **APN** value for the setting at your provider's.
- **Authentication type** – network authentication type.
- **Username** – username for data connection.
- **Password** – password for data connection.

⚠ Caution

- We recommend that you change the PIN code on a regular basis to protect your data and use the SIM card safely.
- Data cannot be connected to the device unless the correct APN value is added.

5.2.2 SIM2

The secondary SIM2 slot is used as the primary SIM1 backup at signal loss. When the SIM1 signal deteriorates or gets lost for more than 180 s (default value), all calls will be automatically forwarded via the SIM2 backup if available. Refer to [5.2.3.2 Network / WWAN / Backup](#) for parameter details.

Network / SIM2

SIM Slot	Enabled ▼
PIN	⊕
APN	
Authentication Type	None ▼
Username	
Password	⊕

- **SIM slot** – enable/disable the SIM card function.
- **PIN** –
- **APN** – parameter for Internet access setting. Check the correct **APN** value for the setting at your provider's.
- **Authentication type** – network authentication type.
- **Username** – username for data connection.
- **Password** – password for data connection.

 **Caution**

- We recommend that you change the PIN code on a regular basis to protect your data and use the SIM card safely.
- For automatic SIM2 switch and backup, remember to enable the SIM slot function for SIM2 and enable the backup service in the Network / WWAN / Backup menu in [5.2.3.2](#).
- Data cannot be connected to the device unless the correct APN value is added.

5.2.3 VoLTE

The VoLTE folder helps you set the VoLTE service, which is used for forwarding calls via the VoLTE network. Make sure that this function is supported by your provider.

Network / VoLTE

IMS	Enabled ▾
IMS State	Ready
User Agent	EGIP
Automatic MBN Selection	Enabled ▾
MBN Profile Name	
Internal MBN Database	Yes ▾
MBN File	<input type="button" value="Choose File"/> No file chosen

- **IMS** – enable/disable call forwarding via LTE to the device.
- **IMS State** – display the LTE call forwarding status.
- **Automatic MBN Selection** – enable the automatic setting of the provider’s profile. The profile list is displayed in the logs upon startup.
- **MBN Profile Name** – set the provider’s profile name for the VoLTE function if Automatic MBN selection is disabled.
- **Internal MBN Database** – allow the parameter to use the profile updating 2N database that is part of the firmware.
- **MBN File** – make sure that the MBN file supplied by the provider for provider network identification is sent to 2N before upload, where it will be added to the secure database of accepted MBN files.

5.2.3.1 DTMF

The screenshot shows a configuration page titled "Network / VoLTE / DTMF". It contains three settings:

- Incoming DTMF Mode:** A dropdown menu set to "By network".
- Duration:** A text input field containing "100" followed by "ms".
- Volume:** A text input field containing "5000".

A blue button labeled "SAVE CHANGES" is located at the bottom right of the form.

Incoming DTMF Mode – choose the DTMF mode: fixed or by network.

Duration – set the tone length between 50 and 450 ms.

Volume – set the volume intensity between 1 and 9999.

5.2.4 WWAN

WWAN or Wireless Wide Area Network is a wireless broadband network. The WWAN network uses the network infrastructure of mobile providers for providing users with wireless connections in large areas. This folder helps you select the provider network technology via which calls are to be forwarded and enable/disable data connection. The folder displays information on their currently active SIM cards.

Network / WWAN

Network Name	<input type="text" value="T-Mobile CZ T-Mobile CZ"/>
MCC + MNC	<input type="text" value="23001"/>
IMSI	<input type="text" value="230015018564313"/>
ICCID	<input type="text" value="8942001600318036713F"/>
Network Selection	<input type="text" value="Auto"/> ▾
Network Technology	<input type="text" value="LTE"/>
Network Signal	<input type="text" value="-63"/> dBm
Signal Quality	<input type="text" value="0"/>
Network State	<input type="text" value="Registered"/>
Active SIM Slot	<input type="text" value="1"/>
SIM State	<input type="text" value="Ready"/>
Turn on data	<input type="text" value="Yes"/> ▾
Data Connection	<input type="text" value="Connected"/>

- **Network Name** – provider's network name.
- **MCC + MNC** – country code and provider network code.
- **IMSI** – IMSI assigned to the SIM card by the mobile provider.
- **ICCID** – SIM card serial number.
- **Network Selection** – select the required network technology.

- **Network Technology** – currently used network technology.
- **Network Signal** – network signal strength.
- **Signal Quality** – will be implemented in the future.
- **Network State** – current provider network connection status.
- **Active SIM Slot** – display the slot in which the SIM card is inserted that allows for the current calling function.
- **SIM State** – active SIM card status.
- **Turn on data** – enable/disable the mobile provider's data.

 **Note**

- Mobile data are turned on by default to provide connection with Elevator Center and VoIP calls.

- **Data Connection** – display the current data connection status.
- [5.2.4.1 Operátor](#)
- [5.2.4.2 Data Connection](#)
- [5.2.4.3 Backup](#)
- [5.2.4.4 Ping](#)

5.2.4.1 Operátor

Network / WWAN / Operator

Selection Mode	<input style="border: 1px solid #ccc;" type="text" value="Automatic"/>
State	<input style="border: 1px solid #ccc;" type="text" value="Automatic Mode"/>
Network Name	<input style="border: 1px solid #ccc;" type="text" value="Vodafone CZ DATA ONLY"/>
Operator Code (MCC + MNC)	<input style="border: 1px solid #ccc;" type="text" value="0"/>
Technology	<input style="border: 1px solid #ccc;" type="text" value="Auto"/>
Confirmation Timeout	<input style="border: 1px solid #ccc;" type="text" value="60"/> s

- **Selection Mode** – defines whether the provider selection will be automatic or obey the settings of the optional parameters below.
- **State** – displays the provider selection status.
- **Network Name** – provider's network name.
- **Operator Code (MCC + MNC)** – used for entering the mobile country code (MCC) and the mobile network code (MNC), e.g. 999 + 999. Enter the MNC in the manual selection mode.
- **Technology** – used for selecting the data network connection technology.
- **Confirmation Timeout** – defines how long the device shall try to establish connection with the manually selected provider. In case the connection fails, the provider will be selected in the automatic mode.

5.2.4.2 Data Connection

The Data Connection folder displays information and data on WWAN connection and helps you add the preferred primary and secondary DNS (Domain Name System).

Network / WWAN / Data Connection

Turn on data	<input type="text" value="Yes"/>
Data Connection	<input type="text" value="Connected"/>
IP	<input type="text" value="100.90.6.180"/>
Network Gateway	<input type="text" value="100.90.6.181"/>
Preferred DNS1	<input type="text"/>
Preferred DNS2	<input type="text"/>
DNS1	<input type="text" value="62.141.16.161"/>
DNS2	<input type="text" value="62.141.16.177"/>
TX Packets	<input type="text" value="1209"/>
RX Packets	<input type="text" value="961"/>
TX Dropped Packets	<input type="text" value="0"/>
RX Dropped Packets	<input type="text" value="0"/>
TX Bytes	<input type="text" value="263855"/>
RX Bytes	<input type="text" value="132955"/>

Note

- Mobile data are turned on by default to provide connection with Elevator Center and VoIP calls.

- **Turn on data** – enable/disable data connection.
- **Data Connection** – display the current data connection status.
- **IP** – current IP address.
- **Network Gateway** – network gateway address.
- **Preferred DNS1** – complete the preferred DNS1 IP address. If no preferred DNS1 is completed, DNS1 supplied by the provider will be used.
- **Preferred DNS2** – complete the preferred DNS2 IP address. If no preferred DNS2 is completed, DNS2 supplied by the provider will be used.
- **DNS1** – DNS address supplied by the provider.
- **DNS2** – DNS address supplied by the provider.
- **TX Packets** – count of transmitted packets.
- **RX Packets** – count of received packets.
- **TX Dropped Packets** – count of packets lost (corrupted) during transmission.
- **RX Dropped Packets** – count of packets lost (corrupted) during reception.
- **TX Bytes** – exact consumption of sent data in bytes.
- **RX Bytes** – exact consumption of received data in bytes.

5.2.4.3 Backup

The Backup folder helps you set a backup for the primary SIM1 card if the signal deteriorates or gets lost for more that 180 s (default value). In case the signal value drops below the required signal low, all the calls will be automatically forwarded via the backup SIM2 if available.

If the backup SIM2 signal gets worse, the device switches back to the primary SIM1 and, if SIM1 allows the use of other networks, starts searching for one. Set the search in Enable network search.

Network / WWAN / Backup

Enable Service: No

Enable Network Search: No

State: Inactive

Network Name: T-Mobile CZ T-Mobile CZ

Min Required Signal: -80 dBm

Time Limit: 1440 min

Switch Repetition: 1440 min

Switch Delay: 180 s

SAVE CHANGES

- **Enable Service** – enable/disable the primary SIM card backup function in the case of a poor or lost signal.
- **Enable Network Search** – the device searches for all available networks according to the signal strength and connects to the network that provides the best data connection for My2N connection. If this parameter is disabled, the device connects to the network with the strongest signal.
- **State** – display the provider selection state.
- **Network Name** – active SIM card provider’s network name.

- **Min Required Signal** – set the minimum value required for the signal strength. In case the signal value drops below the required signal low, the backup SIM2 will be switched on.
- **Time Limit** – set the period of time during which the SIM2 backup connection shall be used.
- **Switch Repetition** – set a timeout following the last SIM2 / SIM1 switch after which it is permitted to switch to the SIM2 backup in case the SIM1 signal is insufficient. This parameter prevents frequent switching of the SIM cards.
- **Swicth Delay** – set a timeout for the deteriorated or lost signal after which the SIM2 backup shall be switched on.

 **Note**

- As set by default, if the secondary SIM2 card connection values are better than those of the primary SIM1, **2N® EasyGate IP** will stay in connection with the secondary SIM2 for 24 hours until it tries to reconnect with the primary SIM1 card again. If the secondary SIM2 card connection values are equal to or worse than those of the primary SIM1 card, **2N® EasyGate IP** will return to the provider's mobile network from the primary SIM1 card. The next connection quality check will take place in 24 hours.

5.2.4.4 Ping

The Ping folder is the basic diagnostic element helping you test the TCP/IP network functions. Ping sends a query to the specified IP address / domain and waits for a response.

Network / WWAN / Ping

Enable	<input type="text" value="No"/> ▾
Transmission Period	<input type="text" value="5000"/> ms
Reception Time Limit	<input type="text" value="1000"/> ms
Time to reboot	<input type="text" value="0"/> min
Unknown Frames	<input type="text" value="0"/>

[SAVE CHANGES](#)

- **Enable** – enable / disable the ping function.
- **Transmission Period** – set the ping query transmission period in ms.
- **Reception Time Limit** – set the reception timeout for responses to ping queries.
- **Time to reboot** – set the device reboot timeout.
- **Unknown Frames** – count of unknown frames captured.
- [5.2.4.4.1 Primary](#)
- [5.2.4.4.2 Backup](#)

5.2.4.4.1 Primary

The Primary folder sets the primary ping server and shows the list of sent queries and received responses.

Network / WWAN / Ping / Primary

ICMP Echo Server	<input type="text"/>	
Min Latency	<input type="text" value="0"/>	ms
Average Delay	<input type="text" value="0"/>	ms
Max Latency	<input type="text" value="0"/>	ms
Late Frames	<input type="text" value="0"/>	
Lost Frames	<input type="text" value="0"/>	
TX Frames	<input type="text" value="0"/>	
RX Frames	<input type="text" value="0"/>	

- **ICMP Echo Server** – primary ping server address.
- **Min Latency** – minimum time delay for returned responses.
- **Average Delay** – average time delay for returned responses.
- **Max Latency** – maximum time delay for returned responses.
- **Late Frames** – count of frames that arrived after the reception time limit. Set the limit in Ping (refer to [5.2.4.4 Ping](#)).
- **Lost Frames** – count of frames that have not reached **2N® EasyGate IP**. The responses that fail to meet the time limit are written as **late** in the device log.
- **TX Frames** – count of ping queries sent.
- **RX Frames** – count of responses received.

5.2.4.4.2 Backup

The Backup folder sets the backup ping server and shows the list of sent queries and received responses if the primary server is inaccessible.

Network / WWAN / Ping / Backup

ICMP Echo Server	<input type="text"/>
Min Latency	<input type="text" value="0"/> ms
Average Latency	<input type="text" value="0"/> ms
Max Latency	<input type="text" value="0"/> ms
Lost Frames	<input type="text" value="0"/>
TX Frames	<input type="text" value="0"/>
RX Frames	<input type="text" value="0"/>

SAVE CHANGES

- **ICMP Echo Server** – backup ping server address.
- **Min Latency** – minimum time delay for returned responses.
- **Average Delay** – average time delay for returned responses.
- **Max Latency** – maximum time delay for returned responses.
- **Lost Frames** – count of frames that have not reached **2N® EasyGate IP**. The responses that fail to meet the time limit are written as **late** in the device log.
- **TX Frames** – count of ping queries sent.
- **RX Frames** – count of responses received.

5.3 My2N / Basic Settings

The 2N® My2N / Basic Settings folder informs of the connection to the My2N cloud service, administering **2N® Elevator Center** for bulk management of the **2N® EasyGate IP** devices.

2N® My2N / Basic Settings

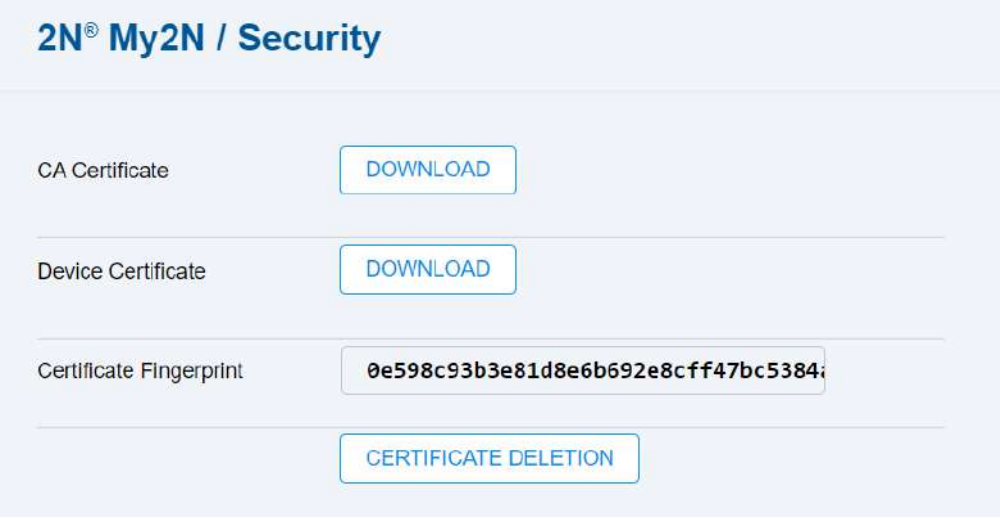
Service	<input type="text" value="Enabled"/>
State	<input type="text" value="Stopped"/>
Device Identifier	<input type="text" value="af6731ac-d807-4af3-91fb-523bf1fdaf"/>
Device Type	<input type="text" value="5.2.0.0"/>
Tunnel Server	<input type="text" value="tribble.my2n.com"/>
Tunnel Port	<input type="text" value="443"/>
Certification Server	<input type="text" value="knock.my2n.com"/>
Certification Port	<input type="text" value="443"/>
Extended Protocol	<input type="text" value="No"/>

[SAVE CHANGES](#)

- **Service** – enable/disable device management using **2N® Elevator Center** via 2N® My2N.
- **State** – 2N® My2N cloud service connection status.
- **Device Identifier** – identifier assigned to the Company created in 2N® My2N.
- **Device Type** – **2N® EasyGate IP** type in the 2N® My2N internal database.
- **Tunnel Server** – tribble tunnel URL for 2N® My2N connection.
- **Tunnel Port** – tribble tunnel port.
- **Certification Server** – address of the knocker that is used for **2N® Elevator Center** connection via 2N® My2N.
- **Certification port** – certification port number.
- **Extended Protocol** – details in the logs on the device communication with **2N® Elevator Center** via 2N® My2N.
- [5.3.1 2N® My2N Security](#)

5.3.1 2N® My2N Security

The 2N® My2N Security folder helps you download certificates for secure communication between **2N® EasyGate IP** and 2N® My2N providing the **2N® Elevator Center** service.



- **CA Certificate** – download the 2N® My2N CA certificate.
- **Device Certificate** – download the device certificate.
- **Certificate Fingerprint** – device certificate identifier stored in the 2N® My2N database.
- **CERTIFICATE DELETION** – remove the SIP certificate from **2N® EasyGate IP**. Once the device connects to My2N, a new certificate is automatically generated.

5.4 SIP / Basic Setup

The SIP / Basic Setup folder helps you set all the required SIP credentials including the secure SIP certificates.

Allow the SIP service and save the settings. Complete the phone number and authorization ID. Enter the password paying attention to the lower/upper case. Complete the SIP server address.

This is the way to SIP registration. Check the SIP status on this folder or the Status folder, where general information on the device is displayed.

Caution

- The SIP registration is not performed in GSM (2G) due to the impossibility to ensure the call quality via this network.

SIP / Basic Settings

Service	<input type="text" value="Enabled"/>
State	<input type="text" value="Registered"/>
Phone Number	<input type="text" value="1506584670"/>
Authorization ID	<input type="text" value="1506584670"/>
Password	<input type="password" value="••••••••"/>
Server	<input type="text" value="proxy-5.my2n.com"/>
Server Port	<input type="text" value="5060"/>
Local Port	<input type="text" value="0"/>
Registration Permission	<input type="text" value="Enabled"/>
Registration Validity	<input type="text" value="120"/> s
Transport Type	<input type="text" value="UDP"/>

[SAVE CHANGES](#)

- **Service** – enable/disable SIP calls.
- **State** – SIP status.
- **Phone Number** – complete the phone number to identify the device uniquely for calls.
- **Authorization ID** – ID to identify the device uniquely.
- **Password** – set the registration password.
- **Server** – set the SIP Proxy server URL.
- **Server Port** – set the server port. Value 0 is used for automatic selection for connection with the other party.
- **Local Port** – will be implemented in the future.
- **Registration Permission** – will be implemented in the future.

- **Registration Validity** – set the re-registration timeout.
- **Transport Type** – select the SIP signaling method:
 - **UDP** – the most frequently used insecure transport protocol.
 - **TLS** – secure protocol where SIP calls and SIP signaling are secured against tapping and third party modifications.
- [5.4.1 SIP Security](#)
- [5.4.2 Others](#)

5.4.1 SIP Security

The SIP Security folder helps you download security certificates for SIP calls using the TLS protocol.

SIP / SIP Security

CA Certificate
DOWNLOAD

Device Certificate
DOWNLOAD

Certificate Fingerprint

Common Name (CN)

CSR GENERATOR

DELETE CERTIFICATE

PKI State
Ready

Device CSR
DOWNLOAD

New CA Certificate

Choose File No file chosen

New Device Certificate

Choose File No file chosen

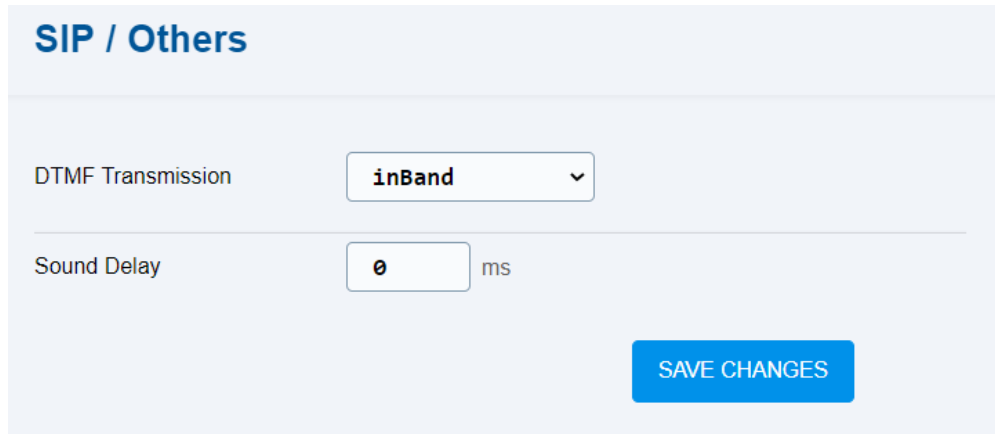
SAVE CHANGES

- **CA Certificate** – download the CA certificate.
- **Device Certificate** – download the device certificate.
- **Certificate Fingerprint** – device certificate identifier.
- **Common Name (CN)** – complete a name for device SIP account identification.
 - **CSR GENERATOR** – generate a certificate signing request.
 - **DELETE CERTIFICATE** – delete all certificate data (CA certificate, device certificate and certificate fingerprint).

- **PKI State** – CSR public key generator status.
- **Device CSR** – download the certificate signing request.
- **New CA Certificate** – upload a new CA certificate.
- **New Device Certificate** – upload a new device certificate.

5.4.2 Others

The SIP miscellaneous folder helps you set other tone dialing properties.



SIP / Others

DTMF Transmission

Sound Delay ms

[SAVE CHANGES](#)

- **DTMF transmission** – set the DTMF transmission method:
 - inBand
 - RTP DTMF
 - info (RFC(2976))
- **Auto delay** – set the sound delay timeout in ms in the range of 0 to 2000 ms. Used for DTMF suppression in the voice channel. The minimum DTMF suppression timeout is 1 ms. By setting the time value to 0 ms, you disable the sound delay function.

5.5 NTP

The NTP folder helps you set the NTP server, which is used for time synchronization by **2N® EasyGate IP**. By default, the NTP server is enabled and time is synchronized according to the set IP addresses, which can be changed. If you disable the NTP server time synchronization, **2N® EasyGate IP** will get time from the active SIM card provider.

NTP

Service: enable

Server 1: time.google.com (Max length: 63 chars)

Server 2: pool.ntp.org (Max length: 63 chars)

Server 3: time.nist.gov (Max length: 63 chars)

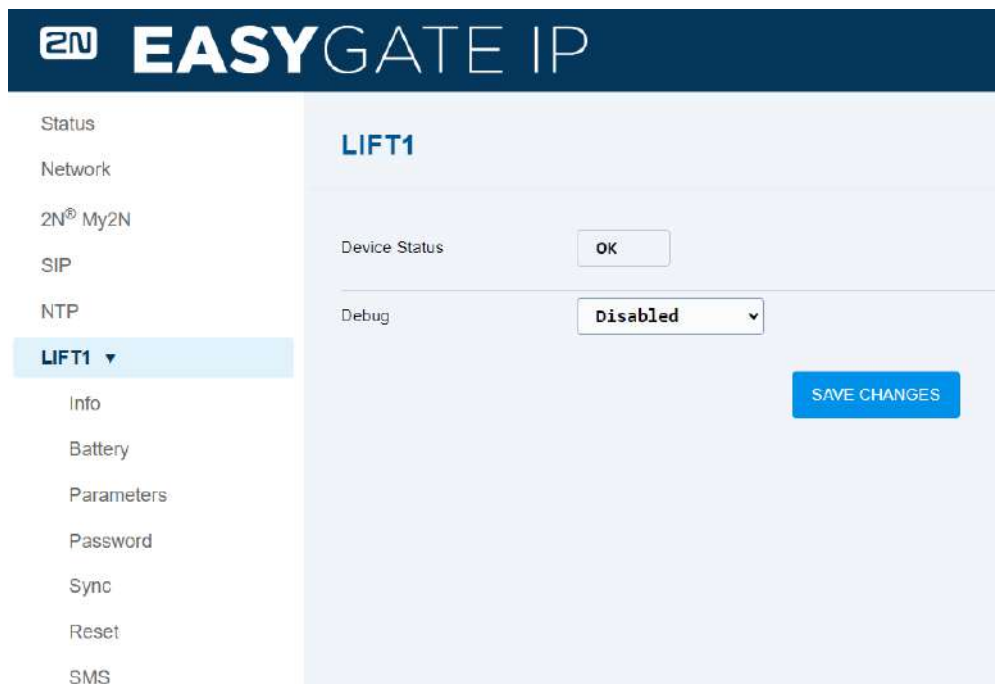
SAVE CHANGES

- **Service** – enable/disable time synchronization from the NTP server.
- **Server 1** – complete URL for the selected primary NTP server.
- **Server 2** – complete URL for the backup NTP server in case Server 1 is unavailable.
- **Server 3** – complete URL for the backup NTP server in case Server 1 and 2 are unavailable.

5.6 LIFT1

The LIFT1 menu helps you configure the **2N Lift1** device with which **2N EasyGate IP** is interconnected.

A **2N Lift1** configuration error is signaled by flashing of the blue power LED indicator for 1.8 s followed by a 0.2 s pause.



- **Device Status** – display information on the **2N Lift1** – **2N EasyGate IP** communication.
 - **OK** – connection OK.
 - **Ring Error** – **2N Lift1** fails to pick up an incoming call.
 - **Connecting Error** – **2N Lift1** picks up an incoming call but fails to switch into the programming mode.
 - **Communication Error** – CRC does not match.
 - **Unknown Password** – the set **2N Lift1** password does not match.
 - **Invalid Profile** – the set profile has not been uploaded to **2N Lift1**.
- **Debug** – disable/enable CPC (DTMF) communication logging.

5.6.1 Info

The Info folder displays information on the **2N Lift1** device.

LIFT1 / Device Information

State	OK
Serial Number	50-2183-2412
Hardware Version	2.0
Custom Parameter	1
Application Version	2.2.0.0.1
Bootloader Version	2.0.2.0.3
Voice Menu	cz9
REFRESH	

Press Refresh to start loading information on **2N Lift1**.

- **State** – display the current **2N Lift1** info state.
 - **OK** – the request has been executed.
 - **Busy** – the FXS line has been seized and is communicating with **2N Lift1**.
 - **Error** – loading information from **2N Lift1** failed.
 - **Unknown** – no information has been downloaded from **2N Lift1** or **2N Lift1** is disconnected.
- **Serial Number** – display the **2N Lift1** serial number.
- **Hardware Version** – display the hardware version.
- **Custom Parameter**
 - **1** – classic **2N Lift1**
- **Application Version** – display the FW version in **2N Lift1**.
- **Bootloader Version** – display the current Bootloader version.
- **Voice Menu** – display the voice menu language and version number.

5.6.2 Battery Status

The Battery Status folder displays information on the **2N EasyGate IP** battery if the service is enabled.

LIFT1 / Battery Status

Enable Service	Yes ▾
Status	OK
Battery Status	Ready
Transferred Battery Status	Ready

TRANSMISSION

SAVE CHANGES

- **Enable Service** – allow **2N EasyGate IP** to submit information on the **2N Lift1** battery status.
 - **No** – **2N EasyGate IP** shall not submit battery error information to **2N Lift1**.
 - **Yes** – **2N EasyGate IP** shall submit battery error information to **2N Lift1** to set up an operational call.
- **Status** – display the status of the **2N EasyGate IP** battery error transmission to **2N Lift1**.
 - **OK** – no current error.
 - **Busy** – **2N EasyGate IP** has seized the line and is submitting battery error information to **2N Lift1**.
 - **Error** – a communication error has occurred (see the **2N Lift1** status for the error type).
 - **Unknown** – synchronization has not been made yet.
- **Battery Status** – display the current battery status.
 - **Ready** – battery OK.
 - **Error** – battery error.
- **Transferred Battery Status** – display the battery status information that has been transferred to **2N Lift1**.
 - **Ready** – battery OK.
 - **Error** – battery error.

Press Transmission to transfer the **2N EasyGate IP** battery status to **2N Lift1**. Press Save changes to save the battery status submitting service enable/disable.

5.6.3 Parameters

The Parameters folder helps you change the intercom identification number or 2N Lift1 profile.

LIFT1 / Parameters

Status	OK
Intercom Identification Number	12345678
Profile Number	1
Submitted Profile Number	0
<input type="button" value="UPDATE"/>	
<input type="button" value="PRESET AND UPDATE"/>	
<input type="button" value="SAVE CHANGES"/>	

⚠ Caution

- If a value is changed in a setting, you have to press Save changes before performing further actions.

- **Status** – display the status of the communication between **2N Lift1** and **2N EasyGate IP**.
 - **OK** – there is no communication between **2N EasyGate IP** and **2N Lift1**.
 - **Busy** – there is a communication between **2N EasyGate IP** and **2N Lift1**.
 - **Error** – the communication between **2N EasyGate IP** and **2N Lift1** failed.
- **Intercom Identification Number** – numerical ID of the lift (identical with parameter 974, refer to Subs. 3.2 Overview of All Programming Functions in the **2N Lift1** User Manual).
- **Profile Number** – user profile number (1–19) to be set for **2N Lift1**.
- **Submitted Profile Number** – user profile number currently uploaded to **2N Lift1**.

Press Update to check the **Profile number** against the **Submitted profile number**. If there is a match, do not set the profile but reset the **Intercom identification number**. If there is no match, set both the profile and the **Intercom identification number**.

The Preset and update button always sets the **Profile number** (without checking the **Profile number** and **Submitted profile number** for a match) and then the **Intercom identification number**.

5.6.4 Password

The Password folder helps you display and set the **2N Lift1** password.

LIFT1 / Password

Status	Ready
Factory Default Password	<input style="width: 90%; border: 1px solid #ccc;" type="text" value="12345"/>
Manual Password	<input style="width: 90%; border: 1px solid #ccc;" type="text" value="12345"/>
Password Selection	Manual (Not Recommended) ▼
New Password	<input style="width: 90%; border: 1px solid #ccc;" type="text" value="12345"/>
Current Password	<input style="width: 90%; border: 1px solid #ccc;" type="text" value="12345"/>
UPDATE	
SAVE CHANGES	

⚠ Caution

- If a value is changed in a setting, you have to press Save changes before performing further actions.
- **Status** – display the **2N Lift1** password status.
 - **OK** – the password is OK.
 - **Busy** – communication between **2N EasyGate IP** and **2N Lift1** is in progress.
 - **Bad password** – neither the **Current password**, nor the **Factory default password** can be used – the passwords are wrong.

- **Not ready** – the password cannot be changed now as the required information has not been read (SIM, e.g.).
- **Ready** – **2N EasyGate IP** is ready for a password change, but the change has not been made yet.
- **Factory Default Password** – backup factory default password (used for **2N Lift1** replacement for a new one, e.g.).
- **Manual Password** – manually entered password (limited to 19 digits).
- **Password Selection** – select the password type to be used.
 - **Manual (Not Recommended)** – **Manual password** is used.
 - **Random (Strong)** – randomly generated password.
 - **IMSI #1 Ending Numbers (Weak)** – the last 5 digits of IMSI SIM 1 are used.
 - **IMSI #1 Hash – hash IMSI SIM 1 (Strong)** – an encrypted short string of letters and digits based on IMSI SIM1 is used.
 - **IMSI #2 Ending Numbers (Weak)** – the last 5 digits of IMSI SIM2 are used.
 - **IMSI #1 Hash (Strong)** – hash IMSI SIM 2 – an encrypted short string of letters and digits based on IMSI SIM2 is used.
 - **IMEI Hash (Strong)** – an encrypted short string of letters and digits based on IMEI is used.
 - **SN Ending Numbers (Weak)** – the last 5 digits of SN are used.
 - **SN Hash (Strong)** – an encrypted short string of letters and digits based on SN is used.
- **New Password** – new password to be set for **2N Lift1**.
- **Current Password** – password currently uploaded to **2N Lift1**.

Press Update to execute the set password change.

5.6.5 Synchronization

The Synchronization folder helps you display and set the password for **2N Lift1**.

LIFT1 / Sync

Enable Service	Yes ▾
Enable State Saving	Yes ▾
State	Success
Saved State	Success

- **Enable Service** – enable/disable synchronization.
 - **Yes** – whenever **2N EasyGate IP** is switched on, the configuration gets synchronized (password, battery and parameters) as set in **Enable State Saving**.
 - **No** – synchronization disabled.
- **Enable State Saving**
 - **Yes** – if the function is enabled, **2N EasyGate IP** only synchronizes the changed settings.
 - **No** – if the function is disabled, **2N EasyGate IP** does not remember the settings and a complete synchronization process is made (if enabled).

Caution

- If **2N Lift1** shows enabled synchronization and is removed from **2N Elevator Center** by **2N EasyGate IP**, **2N Lift1** is deleted and its factory values are restored. If, however, **2N Lift1** has an active call while being removed from **2N Elevator Center**, the factory values are not reset until the call is completed. **2N Lift1** must feature **Success** as the synchronization **State** to allow for factory reset.

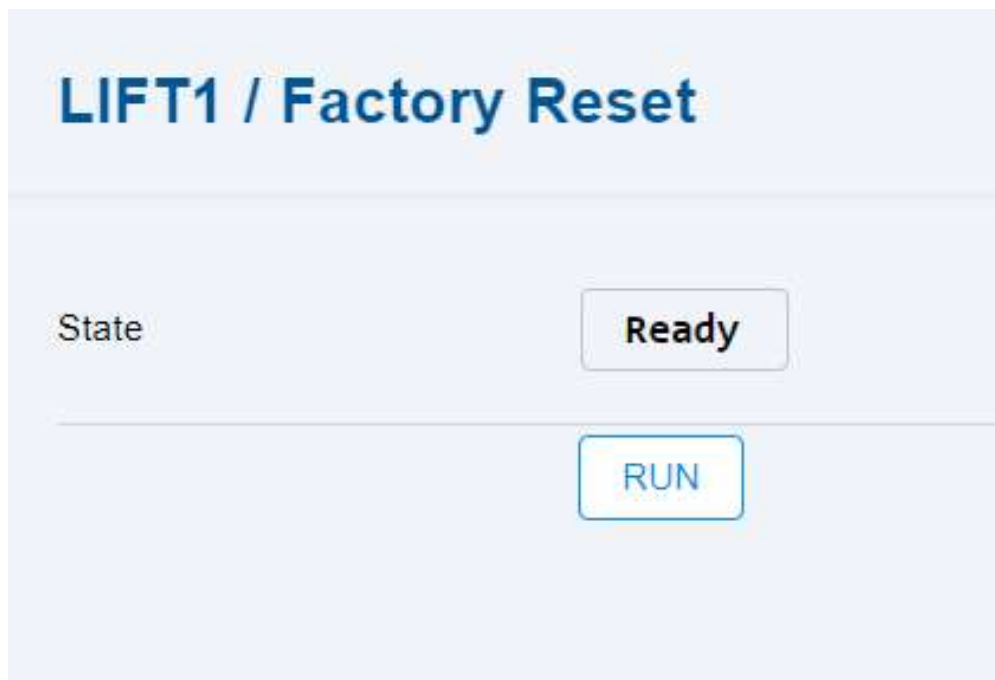
- **State** – display the current **2N Lift1 – 2N EasyGate IP** synchronization state.
 - **Password Maintenance** – password is being set.
 - **Parameter Maintenance** – parameters are being set.
 - **Battery Status Transmission** – battery info is being set.

- **Success** – all settings OK.
- **Error** – synchronization failed (refer to the **2N Lift1** state for the error type).
- **Saved State** – display the saved **2N Lift1 – 2N EasyGate IP** synchronization state.
 - **Success** – synchronization OK, state has been saved successfully.
 - **Error** – synchronization failed, state has not been saved.

Press Run to start **2N Lift1 – 2N EasyGate IP** synchronization.

5.6.6 Factory Reset

The Factory Rest folder helps you reset the **2N Lift1** factory default values.



- **State** – display the current **2N Lift1** factory reset state.
 - **Success** – FXS line is at relax and **2N Lift1** factory reset can be made.
 - **Busy** – FXS line has been seized and is communicating with **2N Lift1**.
 - **Error** – **2N Lift1** factory reset cannot be made (refer to the **2N Lift1** state for the error type).

Press Run to reset the **2N Lift1** factory defaults.

5.6.7 SMS

The SMS folder helps you enable and set programming of a connected **2N Lift1** lift intercom using SMS. Having received an SMS with the programming request, **2N EasyGate IP** establishes connection with **2N Lift1** via a phone line and program it using the CPC protocol.

LIFT1 / SMS

Enable Service

Pre-Authorization

Last Response

Configuration

⚠ Caution

- If a value is changed in a setting, you have to press Save changes before performing further actions.

- **Enable Service** – enable/disable **2N Lift1** programming via SMS. If disabled, **2N EasyGate IP** does not respond to the SMS (sends no response).
- **Pre-Authorization** – verification of the EGIP / LIFT1 password before the SMS request is processed. The EGIP password matches the **2N EasyGate IP** password (serial number / security code). The default LIFT1 pre-authorization password is 12345.
 - **Strong** – verify EGIP password before SMS request processing.
 - **Weak** (default value) – verify LIFT1 password before SMS request processing.
 - **None** – no password verification before SMS request processing.
- **Last Response**
 - **None** – nothing is set upon the start via SMS or **Configuration**, see below.
 - **Successful** – communication OK.
 - **Communication Error** – **2N Lift1** communication error.
 - **Invalid Parameters** – a wrong parameter/value has been entered.

- **Configuration** – configure **2N Lift1** as via SMS by entering the required parameters (e.g. by entering "011=xxxxxxxxxxxxx 012=xxxxxxxxxxxxx 111=2 112=4" you make configuration possible even if the service is disabled, enabled applies to incoming SMS only).

Press Upload configuration to upload the settings to **2N Lift1**.

Press Save changes to save the changes.


SMS Command	SMS Format
Configuration (CNF)	L1 CNF <pwd> <p1>=<v1> [<p2>=<v2> [<p3>=<v3> ...]]
Factory default reset (DEF)	L1 DEF <pwd>
Profile selection (SET)	L1 SET <pwd> <profile>
Device restart (RST)	L1 RST <pwd>
Device information (INF)	L1 INF <pwd>
Response (OK / ERR)	L1 [OK ERR] msg=<msg> cmd=<cmd> seq=<seq>

i The example below programs **2N Lift1** ALARM button memory 1 and 2 for the specified phone numbers.

- SMS format: L1 CNF 12345 011=00420222222222 012=00420111111111
- **The parameters must be separated with a space.**

Description	
<pwd>	authorization password
<profile>	profile number (0 - 19)
<pn>	parameter number
<vn>	numeric value or text value in brackets
<msg>	detailed description
	Successful
	Busy
	Invalid password (EGIP)
	Invalid password (LIFT1)

Description	
	Invalid parameters
	Invalid syntax
	Communication error
	Does not respond
<cmd>	the command to which it responds (CNF,DEF,SET,RST,INF)
<seq>	sequence counter
<num>	numeric value

-  Example of parameter settings:
- L1 CNF <pwd> 100=0

Feedbacks for Commands	
L1 CNF OK	Setting ok
L1 DEF OK	
L1 SET OK	
L1 RST OK	
L1 ERR Invalid Message	Prefix L1 invalid
L1 ERR Unknown Command	Wrong command other than CNF, DEF, SET and RST
L1 ERR Invalid Password	Invalid password
L1 ERR Invalid Parameters	Invalid CNF and SET parameters
L1 ERR Invalid Syntax	Invalid characters (spaces, equal signs, etc.)

Feedbacks for Commands	
L1 ERR Does not Respond	<ul style="list-style-type: none"> • 2N Lift1 fails to hook off within 60s ringing timeout. • 2N Lift1 picks up but fails to respond to the CPC programming command. • 2N Lift1 hangs up during programming. • 2N Lift1 fails to respond to the communication commands (WRITE_START, WRITE_CONFIRM, CRC_REQUEST).
L1 INF sn="<s/n>" hw="<version no.>" cust="<n>" app="<fw no.>" bl="<bl no.>" vm="<voice menu>"	Setting information: <ul style="list-style-type: none"> • sn – serial number • hw – hardware type • cust – user profile (1-19) • app – firmware version • bl – bootloader version • vm – voice menu

⚠ Caution

- Multiple commands cannot be combined in a single SMS.
- The maximum SMS length is 140–160 characters; if a setting outside the value range is requested or an error occurs in the SMS, the setting change will not be performed.

5.7 SMS / Setting

The SMS / Setting folder helps you enable and generally set the SMS sending function.

SMS / Setting

Turn on	<input type="text" value="Yes"/>
Device Identification	<input type="text"/>
Event Recipient Phone Number	<input type="text"/>
Initial Password	<input type="text" value="Security Code"/>
Time Limit (DEF & RST)	<input type="text" value="0"/> min
INF Message Period	<input type="text" value="0"/> min
INF Message Format	<input type="text"/>

[SAVE CHANGES](#)

- **Turn on** – enable/disable the SMS sending function.
- **Device Identification** – set the device ID for SMS.
- **Event Recipient Phone Number** – set the phone number to which an SMS will be sent after an event.
- **Initial Password** – select the parameter whose value will be used as the initial password for authorization in the SMS command.

Caution

- The initial password can only be changed using an SMS command, refer to [5.6.1 Commands](#). Once changed by an SMS command, the initial password can later be changed by an SMS command only.

- **Time Limit (DEF & RST)** – set the timeout after which commands can be resent after the device restart.
- **INFO Message Period** – set the info SMS sending period in minutes.
- **INFO Message Format** – define the INF command reply format by setting space-separated numeric identifiers for the requested parameters. Refer to [5.6.1.1 List of Parameters](#) for the identifier list.

- [5.7.1 Commands](#)
- [5.7.2 Events](#)
- [5.7.3 Digital Input](#)

5.7.1 Commands

The Commands folder helps you send commands via SMS if you are logged in.

SMS / Commands

Information Reading (INF)	<input type="button" value="Yes"/> ▾
Parameter Reading (GET)	<input type="button" value="Yes"/> ▾
Parameter Change (SET)	<input type="button" value="Yes"/> ▾
Password Change (PWD)	<input type="button" value="Yes"/> ▾
Factory Defaults (DEF)	<input type="button" value="Yes"/> ▾
Restart (RST)	<input type="button" value="Yes"/> ▾

- **Information Reading (INF)** – command to send an SMS including basic information (signal, used mobile network technology, provider code and name, battery status).
- **Parameter Reading (GET)** – command to send an SMS including information on selected parameters.
- **Parameter Change (SET)** – command to change parameters in the setting.
- **Password Change (PWD)** – command to change the device password.
- **Factory Defaults (DEF)** – command to reset the device factory defaults.
- **Restart (RST)** – command to restart the device.

SMS Command	SMS Format	Note
Read information (INF)	EG INF password	<p>The reply includes such information as the device serial number, FW version, IMEI and IMSI, roaming status, signal strength, network supply status, battery status and remaining battery time.</p> <p>Set the reply contents using the INF message format parameter.</p> <p>In case 2 SIM cards are used in the device, the SMS reply includes two IMSIs and information related to the active SIM card only.</p>
Read parameters (GET)	EG GET password	<p>E.g.: EG GET initial_password 150 swg_enable sim1_pin</p> <p>(Send the command to get information on the My2N settings, SMS function on the device and SIM 1 PIN code.)</p>
Change parameters (SET)	EG SET password numeric or text identifier=new value	<p>This command helps you change the parameter values; configurable parameters must be assigned numbers.</p> <p>If set as a text, a parameter must be closed in parentheses.</p> <p>E.g.: EG SET initial_password 150=1 swg_period=60 sim1=1234 243=(internet.t-mobile.cz)</p> <p>(Send the command to set the My2N service enable, set the INF message period to 60 minutes, change of SIM 1 PIN code to 1234 and set the APN.)</p>
Change password (PWD)	EG PWD password_old password_new	<p>E.g.: EG PWD initial_password amber</p> <p>The new password will be set as amber.</p>
Set factory defaults (DEF)	EG DEF password	<p>E.g.: EG DEF amber</p> <p>Send the command to reset the factory defaults, which is followed by the device restart.</p>

SMS Command	SMS Format	Note
Restart device (RST)	EG RST password	E.g.: EG RST amber The device will be restarted.
Events		
EG EVT power=[charge backup fully error]		
EG EVT start		
EG EVT slot=[1 2]		
EG EVT input=[0 1] missed=<num>		
Description		
<pwd>	authorization password	
<new_pwd>	new authorization password	
<pn>	parameter (see param or param_id)	
<vn>	numeric value or text value in brackets (see length, size, min, max, enum)	
<msg>	<i>detailed description</i>	
	Successful	
	Unknown command	
	Invalid password	
	Invalid parameters	
	Invalid syntax	
	Does not respond	
	Not allowed	
	Time limit	
	Error	

Description	
<cmd>	the command to which it responds (DEF, RST, INF, PWD, SET, GET)
<seq>	sequence counter
<num>	numeric value

- i** Example of parameter settings:
- EG SET pwd 100=0 sgw_ident=(EGIP 1)

- i** Example of reading parameters:
- EG GET pwd 100 sgw_ident

Command Feedback	
EG SET OK	Setting ok
EG ERR Unknown Command	A command other than SET, GET, DEF, RST, INF has been used
EG ERR Password	Invalid password
EG ERR Invalid Parameters	Invalid parameter in command
EG ERR Invalid Syntax	Invalid characters (spaces, equal signs, etc.)

⚠ Caution

SMS Commands

- The commands are only valid if typed in capital letters.
- One type of command can only be sent via SMS.
- For the GET and SET commands, multiple parameters can be used at the same time separated with spaces. The parameters are set by a numeric or text identifier and can be combined. We recommend that you use numerical identifiers, as they contain fewer characters.
- The maximum SMS length is 140–160 characters. If a setting out of the allowed value range is requested or there is another error in the message, no setting will be made for any parameter.

 **Tip**

- Refer to Subs. [5.6.1.1](#) for the parameter list including identifiers.

5.7.1.1 List of Parameters

The table below provides a list of all available parameters including their numeric and text identifiers that are used for device configuration via SMS commands.

Parameter List							
Numeric Identifier	Text Identifier	Min	Max	Value	Value Description	Value Meaning	Parameter Location
100	sgw_enable			0	false	No	SMS/Setting/Turn on
				1	true	Yes	
101	sgw_ident						SMS/Setting/Device Identification
102	sgw_phone						SMS/Setting/Event Recipient Phone Number
103	sgw_pwd			0	SC	Security Code	SMS/Setting/Initial Password
				1	SN	Serial Number	
				2	IMSI	IMSI	
				3	ICCID	ICCID	
				4	IMEI	IMEI	
104	sgw_time_limit	0	1440				SMS/Setting/Time Limit (DEF & RST)
105	sgw_info_period	0	10800				SMS/Setting/INF Message Period

Parameter List							
Numeric Identifier	Text Identifier	Min	Max	Value	Value Description	Value Meaning	Parameter Location
106	sgw_info_format						SMS/Setting/INF Message Format
120	sgw_event_power			0	false	No	SMS/Events/Power Supply Changes
				1	true	Yes	
121	sgw_event_supervisor			0	false	No	SMS/Events/Supervisor Events
				1	true	Yes	
122	sgw_event_start			0	false	No	SMS/Events/Device Turn-On
				1	true	Yes	
123	sgw_event_slot			0	false	No	SMS/Events/SIM Change
				1	true	Yes	
130	sgw_input_trigger			0	OFF	Disabled	SMS/Digital Input/Starting Mode
				1	POS	By closing	
				2	NEG	By opening	
				3	BOTH	Both	
131	sgw_input_threshold	1000	10000				SMS/Digital Input/Activation Time
132	sgw_input_timeout	1	86400				SMS/Digital Input/Next Event Time
140	sgw_allow_inf			0	false	No	SMS/Commands/Information Reading (INF)
				1	true	Yes	

Parameter List							
Numeric Identifier	Text Identifier	Min	Max	Value	Value Description	Value Meaning	Parameter Location
141	sgw_allow_get			0	false	No	SMS/Commands/ Parameter Reading (GET)
				1	true	Yes	
142	sgw_allow_set			0	false	No	SMS/Commands/ Parameter Change (SET)
				1	true	Yes	
143	sgw_allow_pwd			0	false	No	SMS/Commands/ Password Change (PWD)
				1	true	Yes	
144	sgw_allow_def			0	false	No	SMS/Commands/ Factory Defaults (DEF)
				1	true	Yes	
145	sgw_allow_rst			0	false	No	SMS/Commands/ Restart (RST)
				1	true	Yes	
150	my2n_enable			0	false	Disabled	2N My2N/Basic Settings/Service
				1	true	Enabled	
151	my2n_id						2N My2N/Basic Settings/Device Identifier
152	my2n_tun_server						2N My2N/Basic Settings/Tunnel Server
153	my2n_cert_server						2N My2N/Basic Settings/Certification Server
154	my2n_tun_port						2N My2N/Basic Settings/Tunnel Port

Parameter List							
Numeric Identifier	Text Identifier	Min	Max	Value	Value Description	Value Meaning	Parameter Location
155	my2n_cert_port						2N My2N/Basic Settings/Certification Port
156	my2n_debug			0	false	No	2N My2N/Basic Settings/Extended Protocol
				1	true	Yes	
157	my2n_state			0	RELAX	Pause	2N My2N/Basic Settings/State
				1	IDLE	Unset	
				2	STOPPING	Stopping	
				3	STOPPED	Stopped	
				4	RESTART	Restart	
				5	READY	Ready	
				6	CRT	Certificate Initialization	
				7	TUN	Tunnel Started	
158	my2n_device_type						2N My2N/Basic Settings/Device Type
163	my2n_cert_sha1						2N My2N/Security/ Certificate Fingerprint
165	my2n_pki_delete						2N My2N/Security/ Delete Certificate

Parameter List							
Numeric Identifier	Text Identifier	Min	Max	Value	Value Description	Value Meaning	Parameter Location
200	wwan_data_enable			0	false	No	Network/WWAN/Data Connection/Turn on data
				1	true	Yes	
201	wwan_data_usr_dns1						Network/WWAN/Data Connection/Preferred DNS1
202	wwan_data_usr_dns2						Network/WWAN/Data Connection/Preferred DNS2
203	wwan_data_ip						Network/WWAN/Data Connection/IP
204	wwan_data_gw						Network/WWAN/Data Connection/Network Gateway
205	wwan_data_dns1						Network/WWAN/Data Connection/DNS1
206	wwan_data_dns2						Network/WWAN/Data Connection/DNS2
220	sim1_enable			0	false	Disabled	Network/SIM1/SIM Slot
				1	true	Enabled	
222	sim1_pin						Network/SIM1/PIN
223	sim1_apn_name						Network/SIM1/APN
224	sim1_apn_auth_type			0	NONE	None	Network/SIM1/Authentication Type
				1	PAP	PAP	
				2	CHAP	CHAP	

Parameter List							
Numeric Identifier	Text Identifier	Min	Max	Value	Value Description	Value Meaning	Parameter Location
				4	PAP_CHAP	PAP, CHAP	
225	sim1_apn_username						Network/SIM1/Username
226	sim1_apn_password						Network/SIM1/Password
240	sim2_enable			0	false	Disabled	Network/SIM2/SIM Slot
				1	true	Enabled	
242	sim2_pin						Network/SIM2/PIN
243	sim2_apn_name						Network/SIM2/APN
244	sim2_apn_auth_type			0	NONE	None	Síť/SIM2/Authentication type
				1	PAP	PAP	
				2	CHAP	CHAP	
				3	PAP_CHAP	PAP, CHAP	
245	sim2_apn_username						Network/SIM2/Username
246	sim2_apn_password						Network/SIM2/Password
300	io_input						Tester/I/O/External Input
301	io_relay_on			1			Tester/I/O/Close relay
302	io_relay_off			1			Tester/I/O/Open relay

Parameter List							
Numeric Identifier	Text Identifier	Min	Max	Value	Value Description	Value Meaning	Parameter Location
303	io_relay_state						Tester/I/O/Relay State

5.7.2 Events

The Events folder helps you enable sending SMS upon various events.

SMS / Events

Power Supply Changes Yes ▾

SIM Change Yes ▾

Supervisor Events Yes ▾

Device Turn-On Yes ▾

SAVE CHANGES

- **Power Supply Changes** – enable sending an information SMS upon a power change.
- **SIM Change** – enable sending an information SMS upon a change of the active SIM card.
- **Supervisor Events** – enable sending an information SMS upon detection of a non-standard device system behavior. Software will be restarted upon a non-standard behavior.
- **Device Turn-On** – enable sending an information SMS upon device startup.

5.7.3 Digital Input

The Digital Input folder helps you set sending SMS upon detection of a change on a **2N® EasyGate IP** input.

SMS / Digital Input

Starting Mode

Activation Time ms

Next Event Time s

SAVE CHANGES

- **Starting Mode** – select the digital input change mode that triggers SMS sending.
- **Activation Time** – set a time period in milliseconds during which the digital input has to be in the change mode to generate an event and send an SMS.
- **Next Event Time** – set a time period in seconds during which no new event is generated and no SMS is sent. A new event cannot be generated and SMS cannot be sent until this timeout passes. In this way, repeated sending of SMS informing of a change on the digital input is avoided.

The switches of the device connected to **2N® EasyGate IP** are connected using a 2-pin terminal marked INPUT.

The SMS informing of a change on the device input are sent to the event recipient's phone number.

5.8 Telephony / Dialing

The Telephony / Dialing folder helps you set the call dialing and outgoing call parameters.

Telephony / Dialing

Time to dial ms

Outgoing Calls

SAVE CHANGES

- **Time to dial** – define the timeout during which the device waits for further digits to be dialed. The device starts to establish connection when this timeout passes.
- **Outgoing Calls** – set the outgoing call type:
 - **Barred** – outgoing calls are barred.
 - **SIP, voice** – combination of SIP and voice outgoing calls is allowed. Primarily, SIP calls are used. If SIP fails, voice calls are used. In case the device is not registered with the SIP, voice calls can be used for telephony.
 - **Voice** – voice outgoing calls are only allowed.
 - **SIP** – SIP outgoing calls are only allowed.

 **Note**

- Voice calls are transmitted via VoLTE if available and allowed. If VoLTE is unavailable or disallowed, voice calls are transmitted via CS calls (GSM).

- [5.8.1 Babycall](#)
- [5.8.2 Pulse Dialing](#)
- [5.8.3 Dial Tone](#)
- [5.8.4 Busy Tone](#)
- [5.8.5 Continuous Tone](#)
- [5.8.5 Ring](#)
- [5.8.6 AMR Codec](#)
- [5.8.7 Others](#)

5.8.1 Babycall

The Babycall folder helps you set automatic calls. If the Babycall function is enabled, a defined period of time is counted down after the phone off-hook (the default value is 5000 ms). Unless you start dialing by the end of this timeout, **2N® EasyGate IP** signals the dialing end and starts setting up a call to the predefined phone number – from this moment on, **2N® EasyGate IP** behaves as if dialing was terminated in a standard outgoing call. Any dialing during the Babycall timeout countdown cancels this function and a standard outgoing call is made.

Telephony / Babycall

Enable	<input type="text" value="no"/>
Time	<input type="text" value="5000"/> ms Range from 100 to 60000
Phone number	<input type="text"/> Max length: 31 chars

[SAVE CHANGES](#)

- **Enable** – enable/disable the Babycall function, automatic call without dialing.
- **Time** – set the time interval between the line off-hook and automatic call beginning.
- **Phone number** – define the phone number for the automatic call destination. Enter a valid international phone code for international calls.

5.8.2 Pulse Dialing

The Pulse Dialing folder helps you set the pulse dialing parameters.

Telephony / Pulse Dialing

Delay between digits	<input type="text" value="100"/>	ms
Minimum Pulse Width	<input type="text" value="30"/>	ms
Maximum Pulse Width	<input type="text" value="60"/>	ms
Minimum Delay	<input type="text" value="10"/>	ms
Maximum Delay	<input type="text" value="80"/>	ms
Dialing Reset Timeout	<input type="text" value="300"/>	ms

[SAVE CHANGES](#)

- **Delay between digits** – set the time delay between the pulses. The default value is 100 ms.
- **Minimum pulse width** – set the time value for the minimum pulse width. The default value is 30 ms.
- **Maximum pulse width** – set the time value for the maximum pulse width. The default value is 60 ms.
- **Minimum delay** – set the time value for the minimum inter-pulse delay. The default value is 10 ms.
- **Maximum delay** – set the time value for the maximum inter-pulse delay. The default value is 80 ms.
- **Time to reset dial** – set the timeout value for dialing clearing. I.e. line clearing time that is considered on-hook and cancels the preceding dialing.

5.8.3 Dial Tone

The Dial Tone folder helps you set the dial tone parameters.

Telephony / Dial tone

Frequency 1 Hz
Range from 0 to 3500

Frequency 2 Hz
Range from 0 to 3500

Modulation

[SAVE CHANGES](#)

- **Frequency 1** – set the dial tone frequency. The default value is 452 kHz.
- **Frequency 2** – set the dial tone frequency.
- **Modulation** – set the dial tone modulation:
 - continuous
 - 320/320/640/640

The factory default values are listed in Chapter 3. [Tóny na telefonní lince – provozní tóny.](#)

5.8.4 Busy Tone

The Busy Tone folder helps you set the dial tone parameters.

Telephony / Busy tone

Frequency 1 Hz
Range from 0 to 3500

Frequency 2 Hz
Range from 0 to 3500

Modulation ms

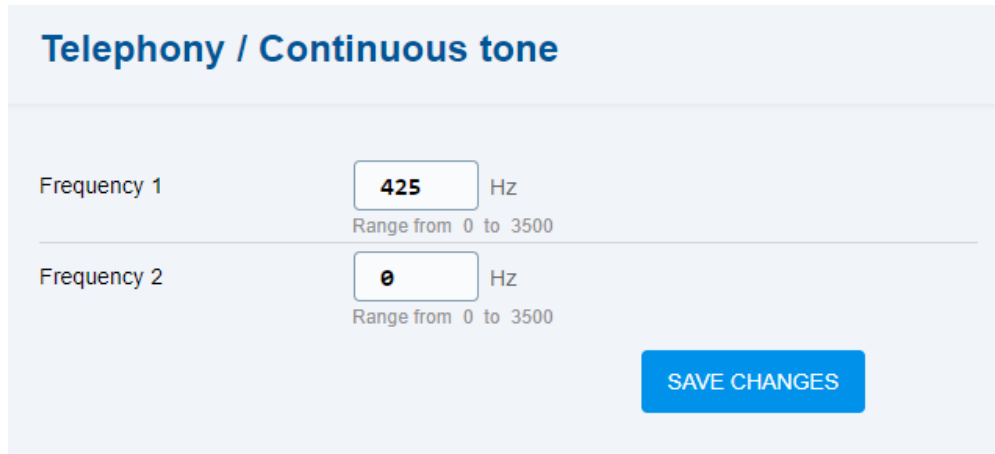
[SAVE CHANGES](#)

- **Frequency 1** – set the busy tone frequency. The default value is 452 kHz.
- **Frequency 2** – set the busy tone frequency.
- **Modulation** – set the busy tone modulation:
 - 330/330
 - 200/200
 - 250/250
 - 375/375
 - 500/500

The factory default values are listed in Chapter 3. [Tóny na telefonní lince – provozní tóny](#).

5.8.5 Continuous Tone

The Continuous Tone folder helps you set the continuous tone parameters.



Telephony / Continuous tone

Frequency 1 Hz
Range from 0 to 3500

Frequency 2 Hz
Range from 0 to 3500

SAVE CHANGES

- **Frequency 1** – set the continuous tone frequency. The default value is 452 kHz.
- **Frequency 2** – set the continuous tone frequency.

The factory default values are listed in Chapter 3. [Tóny na telefonní lince – provozní tóny](#).

5.8.5 Ring

The Ring folder helps you set the ringtone parameters.

Telephony / Ring

Frequency Hz
Range from 10 to 60

Modulation ms

Voltage Vrms
Range from 35 to 60

[SAVE CHANGES](#)

- **Frequency** – set the ringing tone frequency. The default value is 50 Hz.
- **Modulation** – set the ringing tone modulation in ms:
 - 2000/4000
 - 1000/4000
 - 400/200/400/2000
 - 1500/3500
 - 2000/4000
- **Voltage** – set the ringing tone voltage. The default value is 42 Vrms.

The factory default values are listed in Chapter 3. [Tóny na telefonní lince – provozní tóny.](#)

5.8.6 AMR Codec

AMR Codec helps you set the preference of all or each of the AMR codecs. If the AMR codecs are disabled, **2N® EasyGate IP** informs the network that the selected codec will not be used. Yet, the network can request the codec if necessary.

✓ Tip

- It is recommended that the AMR codecs are disabled for a reliable DTMF transmission.

Telephony / AMR Codec

GSM AMR NB	No ▾
GSM AMR WB	No ▾
GSM AMR HR	No ▾
WCDMA AMR WB	No ▾
AMR All	No ▾

SAVE CHANGES

5.8.7 Others

The Miscellaneous folder helps you set the other telephony parameters.

Telephony / Others

RX Gain	<input type="text" value="-2"/>	dB
TX Gain	<input type="text" value="-2"/>	dB
Line Impedance	<input type="text" value="270 ohm + 750 ohm 150 nF (EU)"/>	
Line current limit	<input type="text" value="20"/>	mA
Tone Volume	<input type="text" value="120"/>	mVrms
Enable AGC	<input type="text" value="Yes"/>	
DTMF Muting Time	<input type="text" value="2000"/>	ms
Calling Party Control	<input type="text" value="No"/>	

[SAVE CHANGES](#)

- **RX Gain** – set the receiving line gain. The default value is –2 dB.
- **TX Gain** – set the transmission line gain. The default value is –2 dB.
- **Line Impedance** – set the FXS line impedance.
- **Line current limit** – set a line current value ranging from 15–40 mA.
- **Tone Volume** – set the DTMF tone volume.
- **Enable AGC** – enable/disable Automatic Gain Control for the line signal.
- **DTMF mute time** – set the tone dialing mute time. Mute time is only supported for the RFC and SIP info types of DTMF.
- **Calling Party Control** – use the call end signaling by CPC (Calling Party Control), during which the line current is interrupted for a while.

5.9 Services / Signaling

The Signaling folder is used for battery check activation and 2N® EasyGate IP connection to a mobile network.

Services / Signaling

Relay Function Inactive ▾

Relay Inversion Not Inverted ▾

Relay State Not closed

FXS Line Break Function Disabled ▾

FXS Line Break State Inactive

SAVE CHANGES

- **Relay Function** – define whether and when the relay is activated (closed).
 - **Inactive** – the relay is not activated in the case of power/wireless network failure.
 - **Power Failure** – the relay is activated in the case of power failure (in approx. 120 s).
 - **Wireless Network Failure** – the relay is activated in the case of wireless network disconnection (in approx. 120 s).
 - **Power or Wireless Network Failure** – the relay is activated in the case of power/wireless network failure (in approx. 120 s).
- **Relay Inversion** – inverted relay activation logic. If the relay is inverted, the contact relay opens whenever the above mentioned events are generated (default: Not Inverted).
- **Relay State** – relay state depending on the relay function. The values are not closed/closed.
- **FXS Line Break Function** – define whether and when the FXS line gets disconnected.
 - **Disabled** – the FXS line is not disconnected in the case of power/wireless network failure.
 - **Power Failure** – the FXS line is disconnected in the case of power failure (in approx. 120 s).
 - **Wireless Network Failure** – the FXS line is disconnected in the case of wireless network disconnection (in approx. 30 s).

- **Power or Wireless Network Failure** – the FXS line is disconnected in the case of power/wireless network failure (in approx. 120 s).

- **FXS Line Break State** – state of the relay. The values are active/inactive.
- [5.9.1 Modem via TCP](#)
- [5.9.2 RS-232 via TCP](#)

5.9.1 Modem via TCP

The Modem via TCP folder helps you set data connection from a modem to a server using TCP.

Services / Modem via TCP

Service	<input type="text" value="Disabled"/>
State	<input type="text" value="Disconnected"/>
Idle Time	<input type="text" value="60"/> s
FIFO Queue Size	<input type="text" value="256"/> B
Transmission Debugging	<input type="text" value="No"/>

- **Service** – enable/ disable modem data connection using TCP.
- **State** – display the current TCP state.
- **Idle Time** – set the timeout after which the TCP server connection is terminated if no data is transmitted.
- **FIFO Queue Size** – set the queue size according to the FIFO rules (first in, first out).
- **Transmission Debugging** – enable data transmission to the log in both directions to monitor the whole modem – server communication.

5.9.1.1 TCP

Services / Modem via TCP / TCP

State	<input type="text" value="Disconnected"/>
Server Name	<input type="text"/>
Server Port	<input type="text" value="4000"/>
TCP no delay	<input type="text" value="No"/> ▼
Connection Timeout	<input type="text" value="1"/> min
Reconnect	<input type="text" value="No"/> ▼
Continuous connection	<input type="text" value="No"/> ▼

- **State** – display the current TCP state.
- **Server Name** – set the TCP server name.
- **Server Port** – set the TCP server port.
- **TCP no delay** – allow instantaneous sending of data received by the device. By allowing the function you force instantaneous sending of data to the TCP server.
- **Connection Timeout** – define how long **2N® EasyGate IP** shall try to establish connection with the TCP server.
- **Reconnect** – enable the parameter to make **2N® EasyGate IP** try to reconnect in the case of a socket error. The device shall repeat the attempts until the end of the connection timeout.
- **Continuous connection** – enable the parameter to set that once established, the TCP server connection shall remain active continuously. Once the parameter is allowed, the TCP server connection attempt shall start automatically.

5.9.1.2 Modem

Services / Modem via TCP / Modem

State

Dialed Number Prefix

- **State** – display the connection states.
- **Dialed Number Prefix** – set the DTMF sequence that activates modem negotiation.

5.9.2 RS-232 via TCP

The RS-232 via TCP folder helps you set data connection from RS232 to a server using TCP.

Services / RS-232 via TCP

Service

State

Idle Time s

FIFO Queue Size B

Transmission Debugging

- **Service** – enable / disable RS232 data connection using TCP.
- **State** – display the current TCP state.
- **Idle Time** – set the timeout after which the TCP server connection is terminated if no data is transmitted.
- **FIFO Queue Size** – set the queue size according to the FIFO rules (first in, first out).
- **Transmission Debugging** – enable data transmission to the log in both directions to monitor the whole RS232 - server communication.

5.9.2.1 TCP

Services / RS-232 via TCP / TCP

State	Disconnected
Server Name	
Server Port	4000
TCP no delay	No ▾
Connection Timeout	1 min
Reconnect	No ▾
Continuous Connection	No ▾

- **State** – display the current TCP state.
- **Server Name** – set the TCP server name.
- **Server Port** – set the TCP server port.
- **TCP no delay** – allow instantaneous sending of data received by the device. By allowing the function you force instantaneous sending of data to the TCP server.
- **Connection Timeout** – define how long 2N® EasyGate IP shall try to establish connection with the TCP server.
- **Reconnect** – enable the parameter to make 2N® EasyGate IP try to reconnect in the case of a socket error. The device shall repeat the attempts until the end of the connection timeout.

- **Continuous connection** – enable the parameter to set that once established, the TCP server connection shall remain active continuously. Once the parameter is allowed, the TCP server connection attempt shall start automatically.

5.9.2.2 RS-232

The screenshot shows a configuration page for RS-232 services. The title is "Services / RS-232 via TCP / RS-232". There are two main settings:

- RS-232 State:** A dropdown menu currently showing "Closed".
- Baud Rate:** A text input field containing "115200" followed by the unit "Bd".

A blue button labeled "SAVE CHANGES" is located at the bottom right of the configuration area.

- **RS-232 State** – display the communication states:
 - **Closed** – serial line unfunctional,
 - **Open** – device listens on the serial line,
 - **Active** – server connection active.
- **Baud Rate** – set the serial communication rate.

5.10 Maintenance / Configuration

The Maintenance / Configuration folder helps you configure **2N EasyGate IP** by file downloading, system and battery administration and acquiring system information.

Maintenance / Configuration

Default Values	<input type="text" value="generic-e"/>
Configuration Download	<input type="button" value="DOWNLOAD"/>
Configuration Upload	<input type="button" value="Zvolit soubor"/> Nevybrán žádný soubor
Save Counter	<input type="text" value="6"/>
	<input type="button" value="SAVE CONFIG"/>
	<input type="button" value="FACTORY RESET"/>

- **Default Values** – display the **2N EasyGate IP** type. E – Europe, US – America, AU – Australia.
- **Configuration Download** – download the current device configuration file for backup if necessary.
- **Configuration Upload** – upload the configuration file into the device.
- **Save Counter** – count of configuration changes made.
- **SAVE CONFIG** – save the downloaded configuration to the device.
- **FACTORY RESET** – reset the device factory default values.

Caution

To minimize the risk of data loss in case of unexpected events, we recommend backing up the configuration regularly.

- [5.10.1 Firmware](#)
- [5.10.2 Batteries](#)
- [5.10.3 Temperature Monitor](#)
- [5.10.4 System](#)
- [5.10.5 Soft modem](#)
- [5.10.6 Logs](#)

5.10.1 Firmware

The Firmware folder is used for **2N EasyGate IP** firmware administration.

Maintenance / Firmware

Firmware version	<input style="width: 60%;" type="text" value="1.6.0.1.3"/>
Radio Firmware	<input style="width: 60%;" type="text" value="1.0.0_E"/>
URL for download	<input style="width: 60%;" type="text"/>
Upload file	<input style="width: 60%;" type="button" value="Zvolit soubor"/> Nevybrán žádný soubor
File size	<input style="width: 60%;" type="text" value="0"/> B
Status	<input style="width: 60%;" type="text" value="Ready"/>

- **Firmware version** – firmware version uploaded in the device.
- **Radio Firmware** – module firmware for certification purposes.
- **URL for download** – complete URL for FW download.
- **Upload file** – select a file to be uploaded to the device.
- **File size** – size of the uploaded file.
- **Status** – FW upload status in the device.

Caution

- It is recommended that the latest FW version is always kept for device security and proper access management.
- It is recommended that hard reset of the Internet browser window is made using Ctrl+F5 upon login to the device web interface after upgrade. Thus, all the previously made changes will be completely uploaded.

 **Note**

2N EasyGate IP is equipped with the Secure Boot function in firmware version 1.5.0.0.4 and later. This protection guarantees that the firmware supplied by the manufacturer can only be updated, thus eliminating the risk of the use of unauthorized software. This provides the maximum security and harmless operation of the device.

[5.9.1.1 Detail](#)

5.10.1.1 Detail

Maintenance / Firmware / Detail


Firmware version	1.6.0.1.3
Radio Firmware	1.0.0_E
Date in GIT	Wed May 15 16:23:53 UTC 2024
GIT hash	bda9628b3df162effc9db431bc19f8c032
Build Date	Wed May 15 17:58:56 UTC 2024
License Agreement	OPEN
Third Party Software Licenses	DISPLAY

- **Firmware version** – firmware version uploaded in the device.
- **Radio Firmware** – module firmware for certification purposes.
- **Date in GIT** – last change date of the current FW version.
- **GIT hash** – repository identifier for the FW version currently in use.
- **Build Date** – FW version creation date.
- **License Agreement** – End User License Agreement (EULA).
- **Third Party Software Licenses** – list of third party opensource libraries used in **2N EasyGate IP**.

5.10.2 Batteries

The Batteries folder helps you set the backup battery capacity and service life values.

Maintenance / Battery

Nominal Capacity	<input type="text" value="2100"/>	mAh
Actual Capacity	<input type="text" value="2100"/>	mAh
Installation Date	<input type="text" value="13.04.2021"/>	
Battery Lifespan	<input type="text" value="730"/>	days
Power Source	<input type="text" value="Adapter, Battery"/>	
Status	<input type="text" value="Charging"/>	
Voltage	<input type="text" value="5668"/>	mV
Charging Current	<input type="text" value="129"/>	mA
Charging up	<input type="text" value="12"/>	mAh
Replacement Time	<input type="text" value="730"/>	days

- **Nominal Capacity** – complete the nominal capacity value for the batteries.
- **Actual Capacity** – complete the real capacity value for the batteries.
- **Installation Date** – complete the back up battery installation date.

If the device has valid time and date values (from the provider network or NTP), the battery installation date is set automatically if the following conditions are met:

- the device has received a valid certificate from **2N® Elevator Center** and connects to **2N® Elevator Center**,
- any phone call or modem connection has been established,
- SIP registration has been successful,
- attempt to log in the user to the web interface has been made.

- **Battery Lifespan** – set the service lives for the batteries. The default value is 730 days, i.e. 2 years.
- **Power Source** – information on the possible power supply.
- **Status** – current battery state.
- **Voltage** – current battery voltage.
- **Charging Current** – charging current value if the power supply adapter is used.
- **Charging up** – current consumption during operation of the device.
- **Replacement Time** – remaining time before battery replacement.

Caution

- Only rechargeable batteries can be used. The package includes 4 NiMH type AA, 1.2 V / min. 2000 batteries.

5.10.3 Temperature Monitor

The Temperature Monitor folder informs of the 2N® EasyGate IP temperature.

Maintenance / Temperature monitor

Enable

Temperature °C

State

Lower limit °C
Range from -20 to 10

Upper limit °C
Range from 20 to 70

Hysteresis °C
Range from 1 to 10

[SAVE CHANGES](#)

- **Enable** – enable/disable sending of device temperature information to My2N.
- **Temperature** – current temperature of the device.
- **State** – state of the device with respect to the set limits.
- **Lower limit** – set the temperature low value.
- **Upper limit** – set the temperature high value.
- **Hysteresis** – set the temperature difference by which the device has to exceed the limit values while returning to the allowed temperatures so that the state is OK again.

5.10.4 System

The System menu provides system information on the device and helps you set the USB connection of **2N EasyGate IP**.

Maintenance / System

Product Number

Serial Number

Security Code

IMEI

Secure Boot Mode

USB Connection

Internal Baud Rate Bd

- **Product Number** – product/order/part number of the device.
- **Serial Number** – serial number of the device.
- **Security Code** – 2N My2N registration code.
- **IMEI** – IMEI of the device.
- **USB Connection** – enable/disable the USB connection option. The default value is temporarily allowed.
- **Internal Baud Rate** – set the serial transmission rate between the hardware modem and TCP channel.

⚠ Caution

- The first registration of **2N EasyGate IP** to **2N Elevator Center** via My2N is followed by automatic disable of the USB connection parameter.

5.10.6 Logs

The Logs folder is used for downloading log files from **2N EasyGate IP**, which may be helpful while troubleshooting.

Maintenance / Logs

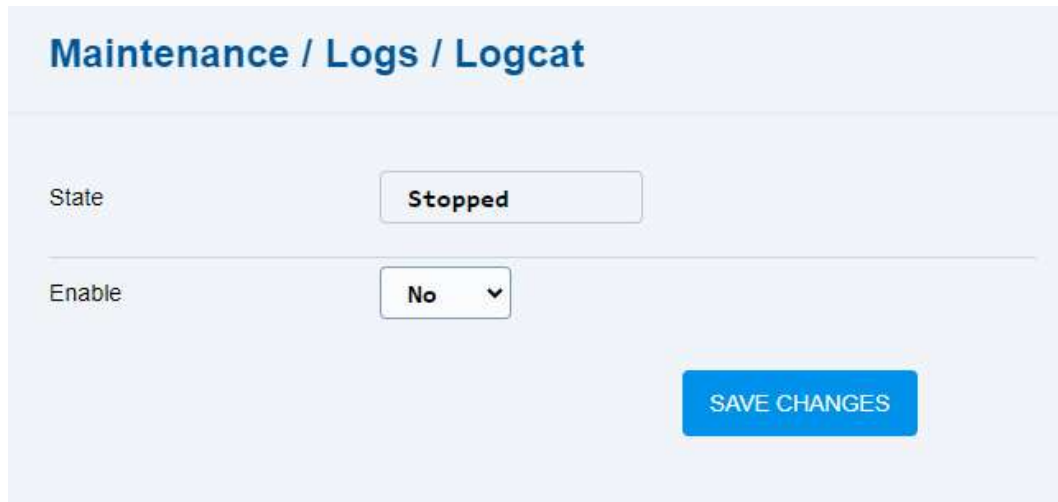
Temporary Protocol	<input type="button" value="DOWNLOAD"/>
Archiving	<input type="text" value="No"/>
Archive Quota	<input type="text" value="5"/> MB
Archived Protocol	<input type="button" value="DOWNLOAD"/>
Application State	<input type="text" value="0"/>

- **Temporary Protocol** – download the current logs after the last **2N EasyGate IP** restart.
- **Archiving** – enable/disable the log archiving function.
- **Archive Quota** – set the storage size (0 to 100 MB). When the set limit is exceeded, the oldest logs will be deleted automatically to provide capacity.
- **Archived Protocol** – download all the logs recorded historically from the archiving function start.
- **Application State** – count of the system SW resets whenever an unexpected problem occurs.

Caution

- We strongly recommend that the device logs be checked on a periodic basis so that the maximum data and device security level can be maintained. Logs are an important error identification and troubleshooting tool.
- A permanent log archiving enable is not recommended. This function is recommended for troubleshooting, but a long-time use may result in the a device memory damage.

5.10.6.1 Logcat



Maintenance / Logs / Logcat

State

Enable

[SAVE CHANGES](#)

- **State** – display the state of the Logcat logging process.
- **Enable** – enable writing of the LogCAT reports into log summary records.

5.10.6.2 Diagnostics

The interface allows to start capturing diagnostic logs, which can then be downloaded and sent to Technical Support. The captured diagnostic logs assist in identifying and resolving reported problems.

Maintenance / Logs / Diagnostics

State	Stopped
Enabled	No ▾
Advanced Log	No ▾
Quota	5 MB
FIFO Size	64 kB
Persistent	No ▾
Protocol	DOWNLOAD
Mask Selection	
Mask Database	DOWNLOAD
	Zvolit soubor Nevybrán žádný soubor

- **State** – display the capture state.
- **Enabled** – enable the diagnostic log capture.
- **Advanced Log** – allow writing into log summary records.
- **Quota** – set the maximum size of the diagnostic log archives.
- **FIFO Size** – set the buffer size for writing into a file (64–2048 kB).
- **Persistent** – set that the diagnostic logs shall be preserved even after restart. If this parameter is not allowed, the diagnostic logs will be deleted during the device restart.
- **Mask Selection** – select a mask from a predefined database. The mask defines the values to be recorded by diagnostics.

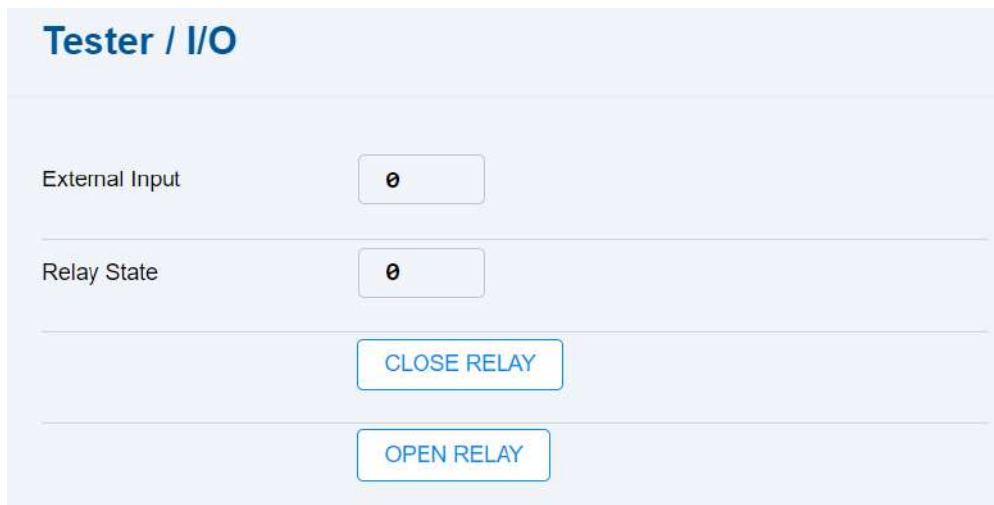
- **Mask Database** – allow the masks to be downloaded and other masks to be uploaded.

5.11 Tester

- [5.11.1 I/O](#)
- [5.11.2 LED](#)
- [5.11.3 Test Call](#)

5.11.1 I/O

The I/O folder helps you test the connected relay via the web interface.



The screenshot shows a web interface titled "Tester / I/O". It features a light blue header. Below the header, there are four rows of controls. The first row is labeled "External Input" and contains a text box with the value "0". The second row is labeled "Relay State" and contains a text box with the value "0". The third row contains a button labeled "CLOSE RELAY". The fourth row contains a button labeled "OPEN RELAY".

- **External Input** – display the external input state (0 – unoccupied, 1 – occupied).
- **Relay State** – display the relay state (closed/open).
 - **Close Relay** – close the connected relay.
 - **Open Relay** – open the connected relay.

5.11.2 LED

The LED folder helps you test the LED function via the device web interface.

Tester / LED

RED

GREEN

BLUE

TURN OFF TEST

- **Red/green/blue** – turn on all the LEDs in the selected color.
- **Turn off test** – turn off all the LEDs.

5.11.3 Test Call

The Test Call folder helps you establish a test call from the device web interface.

Tester / Test Call

State

Phone number

DIAL/ONHOOK

RECORD/STOP

PLAY/STOP

DTMF string

DTMF PLAY

SAVE CHANGES

- **State** – test call state.
- **Phone number** – phone number for the test call.
 - **Dial/on hook** – start / end the test call.
 - **Record/stop** – record / stop a short test call message (up to 10 s).
 - **Play/stop** – play / stop the message recorded.
- **DTMF string** – set the tone dialing string.
 - **DTMF play** – play the tone dialing string.
- **SAVE CHANGES** – save the changes to set the test call.

 **Caution**

- The test call function only works if the 2G, 3G or LTE phone technology is used.
- The person on the other end is not allowed to use VoLTE, as it disables DTMF tones to be transmitted.
- The test call function is not supported for SIP calls.

6. Function and Use

This section describes the basic and extending functions of **2N® EasyGate IP**.

Here is what you can find in this section:

- [6.1 Phone Calls](#)
- [6.2 SIP Calls](#)
- [6.3 VoLTE Calls](#)
- [6.4 GSM / UMTS Calls](#)
- [6.5 Maintenance](#)

6.1 Phone Calls

An outgoing/incoming call establishing procedure is described for a connected analog phone for illustration. The procedure is the same for the **2N® EasyGate IP** – PBX connection, just make sure that the calls are routed properly to the network to a line with **2N® EasyGate IP**.

Outgoing Call

1. Put the phone off-hook, you can hear the dial tone and the Line LED starts flashing.
2. Dial the user number. The interdigit delay may not be longer than 5 s (or as programmed) during dialing. The number is evaluated as complete and transmitted to the GSM network after this timeout.
3. A short delay follows the last-dialed digit for **2N® EasyGate IP** to await further dialing, if any, which is then followed by the dialing end signal and connection setup.
4. If the called user is available, you will hear the ringing tone. If the called user is engaged, you will hear the busy tone or any of the GSM provider's messages.
5. When the called user answers the phone, a call is established. The Line LED is statically on during the call.
6. Hang up to end the call. The Line LED goes off. If the called user is the first to hang up, you will hear the busy tone and hang up.

Incoming Call

1. Ringing signals an incoming call. The Line LED flashes during ringing.
2. Put the phone off-hook to connect the call. The Line LED is statically on during the call.
3. Hang up to end the call. The Line LED goes off. If the called user is the first to hang up, you will hear the busy tone and hang up.

Automatic Call (Babycall)

If the Babycall function is enabled, a pre-programmed period of time is counted down after off-hook. Unless you start dialing by the end of this timeout, a call to the predefined phone number is set up automatically – from this moment on, **2N® EasyGate IP** behaves as if dialing was

terminated in a standard outgoing call. Any dialing during the Babycall timeout countdown cancels this function and a standard outgoing call is made.

6.2 SIP Calls

SIP is a service which provides calls via the Internet. Data has to be permitted for SIP calling.

SIP / Basic setup

Service	<input type="text" value="enable"/>
State	<input type="text" value="registered"/>
Phone number	<input type="text" value="1506584670"/> <small>Max length: 31 chars</small>
Authorization ID	<input type="text" value="1506584670"/> <small>Max length: 31 chars</small>
Password	<input type="password" value="••••••••"/> ⊕ <small>Max length: 31 chars</small>
Server	<input type="text" value="proxy-5.my2n.com"/> <small>Max length: 63 chars</small>
Server port	<input type="text" value="5060"/>
Local port	<input type="text" value="0"/>
Registration enable	<input type="text" value="enable"/>
Registration expire	<input type="text" value="120"/> sec
Transport type	<input type="text" value="UDP"/>

Allow SIP calls in SIP / Basic setup by enabling the service and setting the values. Domain, Proxy and Proxy port are optional parameters. Mind the upper/lower case while completing the password.

If Server port and Proxy port are set to 0, the port numbers are retrieved from the DNS service log (i.e. assigned by the network). If Local port is set to 0, port 5060 is used.

⚠ Caution

- Make sure that **2N® EasyGate IP** is registered to make calls via SIP. This means that peer-to-peer calls cannot be made.

6.3 VoLTE Calls

The VoLTE service provides the highest quality calls via the LTE network. The service is available wherever there is an LTE signal.

Network / VoLTE

IMS	Enabled
IMS State	Ready
User Agent	EGIP
Automatic MBN Selection	Enabled
MBN Profile Name	
Internal MBN Database	Yes
MBN File	Choose File No file chosen

SAVE CHANGES

Turn on the IMS function on the Network / VoLTE card to enable the VoLTE function in the device. Data is enabled by the device by default, use the Network / WWAN card to change the setting. Make sure that the Network technology value on the WWAN card is always LTE (i.e. connection to LTE network) for the VoLTE calls. VoLTE calls are also available with automatic network selection if an LTE network is available.

Network / WWAN

Network name	<input type="text" value="T-Mobile CZ T-Mobile CZ"/>
MCC + MNC	<input type="text" value="23001"/>
IMSI	<input type="text" value="230015017186369"/>
ICCID	<input type="text" value="8942001500318627497F"/>
Network selection	<input type="text" value="Auto"/> ▼
Network technology	<input type="text" value="LTE"/>
Network signal	<input type="text" value="-75"/> dBm
Signal quality	<input type="text" value="0"/>
Network status	<input type="text" value="Registered"/>
Active SIM slot	<input type="text" value="1"/>
SIM status	<input type="text" value="Ready"/>
Enable data	<input type="text" value="yes"/> ▼
Data connection	<input type="text" value="Connected"/>

This is how the VoLTE calls are set.

6.4 GSM / UMTS Calls

To make GSM/UMTS calls, change the outgoing call type from SIP, voice to Voice in [5.6 Telephony / Dialing](#) and disable IMS in [5.2.3 VoLTE](#).

Telephony / Dialing

Time to dial ms
Range from 500 to 10000

Outgoing calls ▼

SAVE CHANGES

6.5 Maintenance

Disposal of Device

If you need to dispose of the device, follow the appropriate safety and environmental protection requirements. Make sure that the disposal complies with the applicable waste management laws and standards in order to protect the environment and minimize potential risks and hazards associated with disposal of electronic equipment.

Warning

Make sure before disposal that all of your sensitive data have been removed by factory default resetting to avoid unauthorized access to information.

7. Technical Parameters

Power supply

- **Mains supply:** 240 / 12 V; 1 A, power adapter
 - **Direct current supply:** 9 to 30 V DC
- **Consumption 12 V DC:**
 - at rest – 100 mA
- **Internal batteries:** 4x NiMH type AA, 1.2 V / min. 2000 mAh

Warning

- 2N only guarantees the quality of the **2N® EasyGate IP** when using power adapters supplied by 2N. If other power adapters are used, 2N cannot guarantee error-free operation of the device.

Configuration and upgrade

- **Local:** WEB UI via USB
- **Cloud service:** 2N® Elevator Center

Antenna

- **Connector type:** SMA
- **Impedance:** 50 Ω

Line interface

- **Interface type:** 2-wire analog, FXS
- **Call impedance:** selectable – 600 Ω, Zr EU, Zr Australia
- **Loop voltage:** 48 V DC
- **Loop current:** 20 mA
- **Loop resistance:** 800 Ω max
- **Ring voltage:** adjustable, 35 – 60 V RMS
- **Ring frequency:** adjustable, 10 – 60 Hz

INPUT

- **Shorting input**

OUTPUT

- **Type:** Relay output
- **Contacts:** Switching, with normally open and normally closed
- **Switched voltage DC:** 30 V, 1 A max
- **Switched voltage AC:** 125 V, 0.3 A max
- **Resistive load**

Serial Line

- **Type:** RS232

- **Connection:** RX, TX, GND

Telephone network

GSM bands

- EU version: EGSM 900 MHz/GSM 1800 MHz
- US version: No
- AU version: EGSM 850/900 MHz, GSM 1800/1900 MHz

UMTS bands

- EU version: 850/900/2100 MHz
- US version: 850/1700/1900 MHz
- AU version: 850/900/1900/2100 MHz

LTE bands

- EU version: B1,B3,B5,B7,B8,B20
- US version: B2, B4, B12
- AU version: B1,B3,B5,B7,B28, B40

VoIP

- **Protocol:** SIP (RFC3261) over UDP, SIPs, SRTP
- **DTMF:**
 - In-band Analogy to the traditional DTMF signal, where tones are combined with speech into a single voice channel.
 - SIP INFO (RFC 2976) DTMF signal is sent separately in the SIP message body.
 - RTP Event (RFC 2833) as part of the RTP stream.

Mechanical properties

- **Dimensions:** 195 x 119 x 61 mm
- **Weight:** 600 g
- **Operating relative humidity:** up to 90 %, non-condensing
- **IP cover:** IP43
- **Operational temperature:**
 - temperature range without batteries: -40 °C to +85 °C (-40 °F to +185 °F)
 - temperature range with batteries: 0 °C to +45 °C (32 °F to +113 °F)
- **Storage temperature:** -20 °C to +45 °C (-4 °F to +113 °F)
- **LED statuses:** power, mobile network, FXS line, data, signal level
- **Certifications:**
 - EN 62368-1, EN 81-28, EN 301489-1, EN 301489-7, EN 301511, EN 301908-1, EN 301908-2, EN 301908-13, EN 62311, EN 63000, EN 12016
 - FCC Part 15b, UL 62368-1, PTCRB
 - ICES-003 Issue 6, CSA C22.2 No.62368-1
 - AS/CA S003.1, S003.3, S042.1, S042.4, AS/NZS 62368.1 App ZZ

8. Supplementary Information

This section describes supplementary information on the product.

Here is what you can find in this section:

- [8.1 Troubleshooting](#)
- [8.2 Directives, Laws and Regulations](#)
- [8.3 General Instructions and Cautions](#)

8.1 Troubleshooting

Problem	Solution
No LED indicator is in on 2N® EasyGate IP .	<ul style="list-style-type: none"> • Check whether the switch is in turning-on position 0/I. • Check the power supply and battery status.
All of the LED indicators are on on 2N® EasyGate IP , there is no active call on the line (data LED is on as set in SIP settings).	<ul style="list-style-type: none"> • Turn off and on again, the LEDs should go off in 3 s and indicate the current device state.
2N® EasyGate IP does not log in.	<ul style="list-style-type: none"> • Check the SIM card insertion. • Check the inserted SIM card for PIN request. • Check the antenna connection. • Make sure that the installation site has a good network signal.
No tone can be heard after off-hook.	<ul style="list-style-type: none"> • Check the telephone line connection. • The device may not be initialized after the start (approx. 20 s after power up). • Check the power and wireless failure settings in the Service / Signaling folder.
2N® EasyGate IP does not communicate with the PC via USB.	<ul style="list-style-type: none"> • Check whether the switch is in turning-on position 0/I. • Check the power supply and battery status. • Unlock USB using the RESET button if the 2N® EasyGate IP setting allows so. If not, reset the factory default values. • Use 2N® Elevator Center for login to the device.

Problem	Solution
2N® EasyGate IP fails to communicate with 2N® Elevator Center .	<ul style="list-style-type: none">• Use USB for login to the device.



For the most frequently asked questions refer to faq.2n.cz.

8.2 Directives, Laws and Regulations

2N® EasyGate IP conforms to the following directives and regulations:

- 2014/53/EU for radio equipment
- 2014/33/EU for lifts and safety components for lifts
- 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment
- 2012/19/EU on waste electrical and electronic equipment

8.3 General Instructions and Cautions

Please read this User Manual carefully before using the product. Follow all instructions and recommendations included herein.

Any use of the product that is in contradiction with the instructions provided herein may result in malfunction, damage or destruction of the product.

The manufacturer shall not be liable and responsible for any damage incurred as a result of a use of the product other than that included herein, namely undue application and disobedience of the recommendations and warnings in contradiction herewith.

Any use or connection of the product other than those included herein shall be considered undue and the manufacturer shall not be liable for any consequences arisen as a result of such misconduct.

Moreover, the manufacturer shall not be liable for any damage or destruction of the product incurred as a result of misplacement, incompetent installation and/or undue operation and use of the product in contradiction herewith.

The manufacturer assumes no responsibility for any malfunction, damage or destruction of the product caused by incompetent replacement of parts or due to the use of reproduction parts or components.

The manufacturer shall not be liable and responsible for any loss or damage incurred as a result of a natural disaster or any other unfavourable natural condition.

The manufacturer shall not be held liable for any damage of the product arising during the shipping thereof.

The manufacturer shall not make any warrant with regard to data loss or damage.

The manufacturer shall not be liable and responsible for any direct or indirect damage incurred as a result of a use of the product in contradiction herewith or a failure of the product due to a use in contradiction herewith.

All applicable legal regulations concerning the product installation and use as well as provisions of technical standards on electric installations have to be obeyed. The manufacturer shall not be liable and responsible for damage or destruction of the product or damage incurred by the

consumer in case the product is used and handled contrary to the said regulations and provisions.

The consumer shall, at its own expense, obtain software protection of the product. The manufacturer shall not be held liable and responsible for any damage incurred as a result of the use of deficient or substandard security software.

The consumer shall, without delay, change the access password for the product after installation. The manufacturer shall not be held liable or responsible for any damage incurred by the consumer in connection with the use of the original password.

The manufacturer also assumes no responsibility for additional costs incurred by the consumer as a result of making calls using a line with an increased tariff.

Electric Waste and Used Battery Pack Handling



Do not place used electric devices and battery packs into municipal waste containers. An undue disposal thereof might impair the environment!

Deliver your expired electric appliances and battery packs removed from them to dedicated dumpsites or containers or give them back to the dealer or manufacturer for environmental-friendly disposal. The dealer or manufacturer shall take the product back free of charge and without requiring another purchase. Make sure that the devices to be disposed of are complete.

Do not throw battery packs into fire. Battery packs may not be taken into parts or short-circuited either.

