ASC Global

EasyLine 4G

PROFESSIONAL GSM/GPRS TRANSPONDER AND
MINIATURE TELEPHONE LINE (PSTN) SIMULATOR

INSTRUCTIONS AND INSTRUCTIONS FOR USE

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Description of the device, how it works

The GSM device is an analogue telephone line simulator, which can be used as an add-on to an alarm control panel to replace an existing telephone line that is of poor quality or otherwise difficult to install in a difficult location. The advantage of the module is its so-called Plug&Play design, which means that only an active SIM card is required to use the line simulator function.

Full *PSTN* line simulation can be achieved by generating line and ringing voltages and transmitting *DTMF* tones. This standard telephone line guarantees that you can connect the module to an existing system without any special migration difficulties.

The GSM module is capable of two-way communication. In case of an incoming call, remote access and programming of a device connected to the *TIP/RING* points is possible (if the device is suitable and the available network conditions allow it).

The module can be modified at any time by means of SMS commands without the need for physical access, knowing the security code.

The module has 1 *SMS* input. This *input* is capable of being normally closed (NC) to the *GND* point. SMS notification can be triggered by breaking the closed loop between *the input* and the *GND* point. The text of this SMS and the phone number to be notified can be modified at any time by 1 SMS.

The module has 1 open collector output, which is switched *to GND* when activated. If a relay is connected, one half of the relay must be connected to +12V and the other half to the Open collector for proper operation. For inductive loads (e.g. when using the above mentioned relay) the use of a protective diode is mandatory!

Control of the output is possible by toll free call from an unlimited number. For control by caller identification, the numbers are stored in the internal memory of the module (in this case 1000 numbers can be entered). Caller identification prevents unauthorised control of a device connected to the output.

The output can be loaded with 300mA and a maximum voltage of 30V can be connected.

The module also monitors the GSM signal strength status in addition to continuously monitoring the power supply. Up to 1 hour resolution can be displayed on a graph using the programming software.

Programming of the module can be done by SMS command or on PC using programming software.

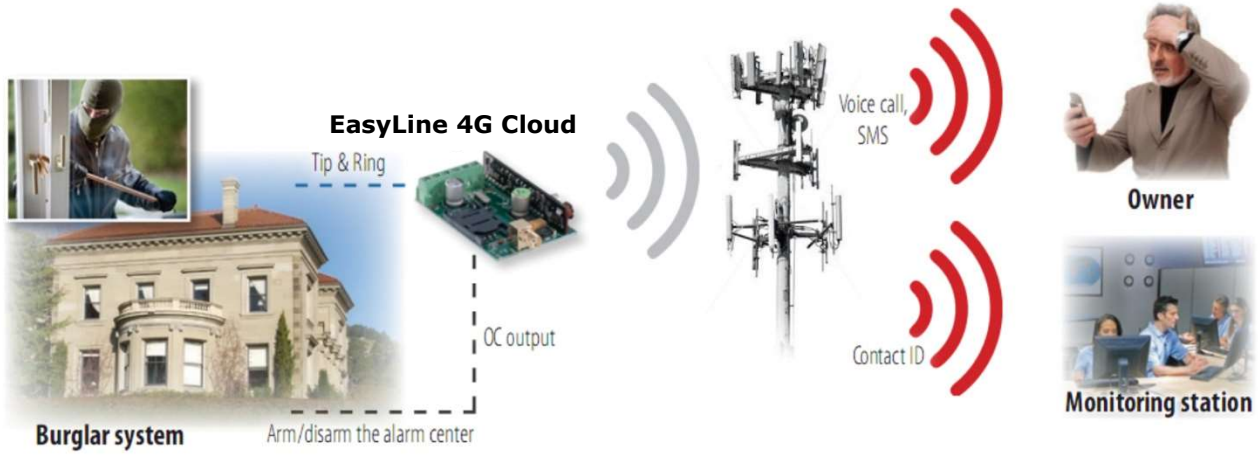


Figure 1: Device operation

In a future development, a simple FW update will allow the conversion of Contact ID codes from the alarm centre into text and SMS transmission to 8 specified phone numbers, in addition to the line simulator functions.

Structure of the module

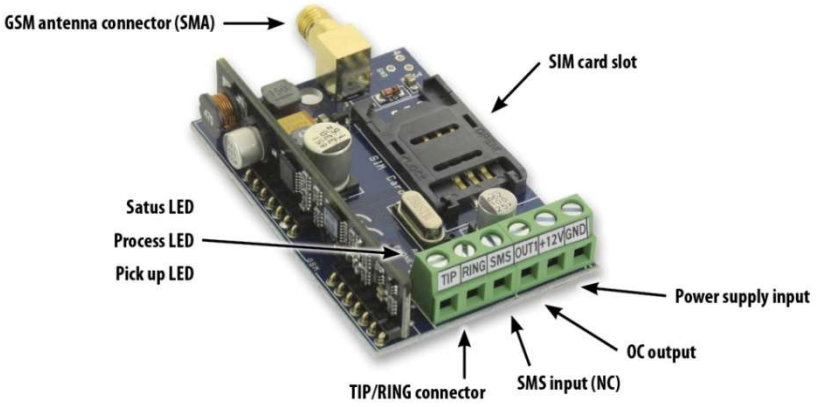


Figure 2: the buildup of the module

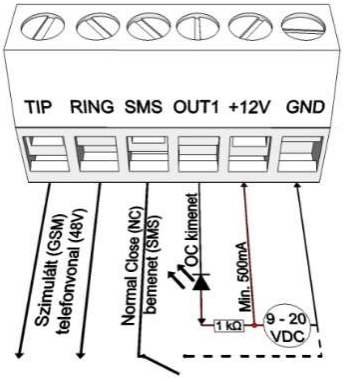


Figure 3: Wiring diagram

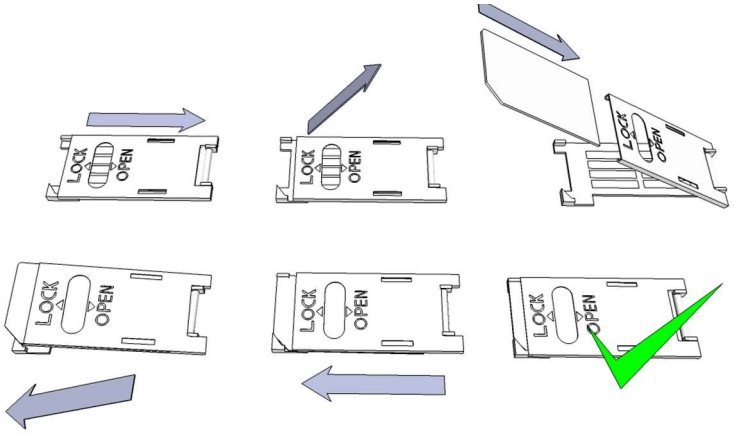


Figure 4: SIM card insertion

Installation instructions

Technical specifications

- Power supply voltage: 9-24 VDC
- Simulated voltage: 48V (line), 72V (ring)
- Standby current consumption: 80 mA
- Maximum current consumption: 1000 mA
- Open collector output load capacity: max. 30V / 300 mA
- Module type: SIMA7672
- Module frequencies: TDD-LTE B38/B40/B41, FDD-LTE B1/B3/B5/B7/B8/B20, WCDMA/HSDPA/HSPA+ B1/B5/B8, GSM/GPRS/EDGE 900/1800 MHz
- SIM card usage: network independent GSM module
- GSM antenna type: SMA connector (included)
- Size: 62 x 42 x 16 mm, packed: 132 x 128 x 32 mm
- Operating temperature: -20°C - +50°C

Installation steps

1. Measure the signal strength with your mobile phone. There may not be enough signal strength at the desired location. In this case, it is recommended to change the location of the module before installation.
   Do not install the device in a place where it may be subject to strong electromagnetic interference, e.g. near electric motors, directly next to the alarm transformer!
   Do not install in damp or humid locations!
2. Antenna connection: the antenna can be fixed with an SMA connector. In case of poor reception, use a higher gain antenna. You can also improve the reception by changing the position of the antenna.
   Do not place the antenna under metal enclosures of various equipment, as this can significantly reduce the signal strength!
3. **Disable PIN code requests, voicemail and call notifications on the SIM card.**
   The newly purchased SIM card must be activated occasionally (usually to make an outgoing call). Check the validity of the card, the balance and its usage (e.g. call only) in case of a top-up plan.
4. Before inserting the SIM card into the module, it is advisable to check that it is working properly by inserting it into a mobile phone.
   The display of the caller number on the card should be checked from both the calling and the called side. This function must be enabled separately for some service providers.
5. Insert the SIM card into the module card slot.
6. The connectors must be connected according to the wiring diagram. When using the OC output, make sure that the protection diode used for the relays is connected correctly.
7. When using an OC relay, pay particular attention to avoid the risk of accidents due to high currents. Ensure that adequate contact protection is provided. If you are not experienced, seek expert advice.
8. Check that the power supply is sufficient for the module. Pay attention to the polarity. Reversed polarity may cause the module to fail to start, possibly causing damage.
9. After this, the device can be connected to the power supply.
10. After power is applied, the red LED will light up, indicating that the device is starting to connect to the GSM network (it may take up to 1 minute).
11. If the red LED goes off and the green LED flashes, the module is operational and connected to the network. The number of flashes indicates the GSM signal strength.

For programming, the power supply must be connected!

LED indications

The LEDs provide basic information about the status of the module, the GSM signal strength and possible errors. Flashing is the number of flashes between two long pauses.

- The continuous illumination of the **Phone** LED (red) indicates when a device connected to the module is "on line". Flashing of this LED also indicates reception of DTMF tones or dial-in.
- The **Status** LED (green) provides feedback on the quality of GSM signal strength as shown in the table below:

Number of flashes	Quality of reception
1	Bad
2	
3	Satisfactory
4	Good
5	Excellent
Continuous lighting	GSM connection refused

- The **Act** LED (red) is lit to indicate the initialization process at power on, at which point the module performs the initial checks. Otherwise, an event is being sent (SMS or voice call).
- If the red and green LEDs flash simultaneously, this indicates a fault, as shown in the table below
- To exit modem mode, open the "module status" window in the maintenance menu

Number of flashes	Error code
1	Initialization
2	GSM module bad
3	SIM card not inserted
4	SIM card locked with PIN code
10	Modem mode

SMS security code **1234** by default	SMSTEL=	In case of a loop break between SMS input and GND points, to which phone number to send a notification
	TELBE=	Specify a phone number to which incoming SMS messages will be forwarded. ***Never enter the phone number of the module here!***
	KSMS=	SMS text (end with *)
	OUT=	Control time in seconds for open collector output, always 3 characters (e.g. 030, maximum 200)
	SMSPIN=	New security code for SMS command (4 characters)
	INFO	Module Status information
	ADD	Saving the control phone number to internal memory
	DEL	Delete control phone number from internal memory
	RESTART	Restart module

Connecting the module (PC)

***Connection procedure using* USB adapter**

- Plug the USB adapter into the socket marked *Program* on the module.

1. ***The USB adapters*** are able to provide ***sufficient power to*** the GSM module ***for programming.***
2. Plug the USB connector of the adapter into any USB port of the PC using a USB extension cable.
3. **ATTENTION: For Windows operating systems,** the system will offer to install the driver automatically. It is IMPORTANT that you do not install using the system, but **using the USB driver.**

   Manual USB driver installation in 10 steps

   ✓ Get the driver you need from our website
   ✓ Use the 32 or 64 bit driver compatible with your system for the rest of the installation
   ✓ To check compatibility, go to Control Panel → System
   ✓ Connect the USB driver to your computer
   ✓ Switch off the automatic installation offered by the system.
   ✓ Open the ***Device Manager*** window located under the Control Panel → System → Hardware tab.
   ✓ In the window that appears, locate ***the unknown device*** that appears under Other Devices (which in this case is the programmer itself, later ***called USB Serial port***). If you do not see such a device, start the "Find Hardware Changes" process from the top menu bar of the window.
   ✓ Double click on the unknown device to display the device properties
   ✓ Start the driver update function
   ✓ In the installation window that is launched, select the driver location manually and then select the 32-bit or 64-bit driver version directory.

   Click next and start the installation
4. Open the Device Manager (System → Properties → Hardware tab → ***Device Manager*** button)
5. Locate the device labeled USB Serial port (COM...) under the Ports section
   - If it is necessary to reinstall the driver, click on the device here to uninstall the driver first, then proceed as described in the previous step.
6. Open the driver software
7. You need to set the value in brackets [USB Serial port (COM...)] in the programming software.
8. After this, the name of the connected GSM module will be displayed next to the ***Start*** button.

Connection procedure using Bluetooth adapter

- Connect the Bluetooth adapter to the GSM module and then place it under power.

1. Activate the Bluetooth connection on your programming device (PC or mobile phone).
2. Locate the programmer using your Bluetooth enabled device.
3. Once you have found the adapter, pair your PC, smartphone, tablet with the adapter using the default **1234** code. Once paired, the programmer will be found as **WiFi/BT Programmer**.
4. Find the COM port ID number of the connection (usually found under *Properties* -> *Hardware* tab)
5. Also set the port number in the programmer software (PC)
6. Connect to the GSM module.

In all cases, you can tell that a successful connection has been established by the name of the connected GSM module appearing next to the ***Start*** button in the programming software, or by the green LED on the programmer starting to flash.

Once the connection has been established between the adapter and the computer or mobile phone, you can start configuring the module.

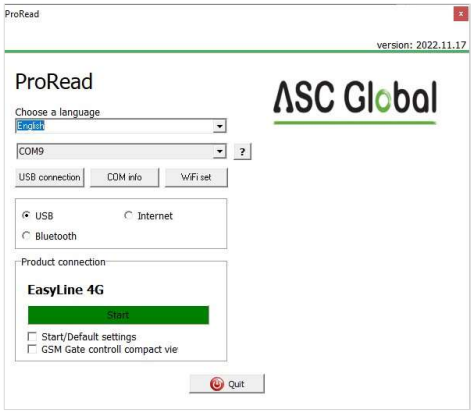
- Once connected, clicking on the *Start* button will display the module settings
- Click on *Start/Default Config* to reset the module to factory default (after confirmation)

Programming via PC software

- For PC setup and programming, use our software, which you can download free of charge from our website.
- The program can be run independently and does not require installation.

- Compatible with Windows 7, 8 and 10 and 11 operating systems
- Make sure you always use the latest software!
- If using more recent software, it is recommended to update the module before the first configuration.

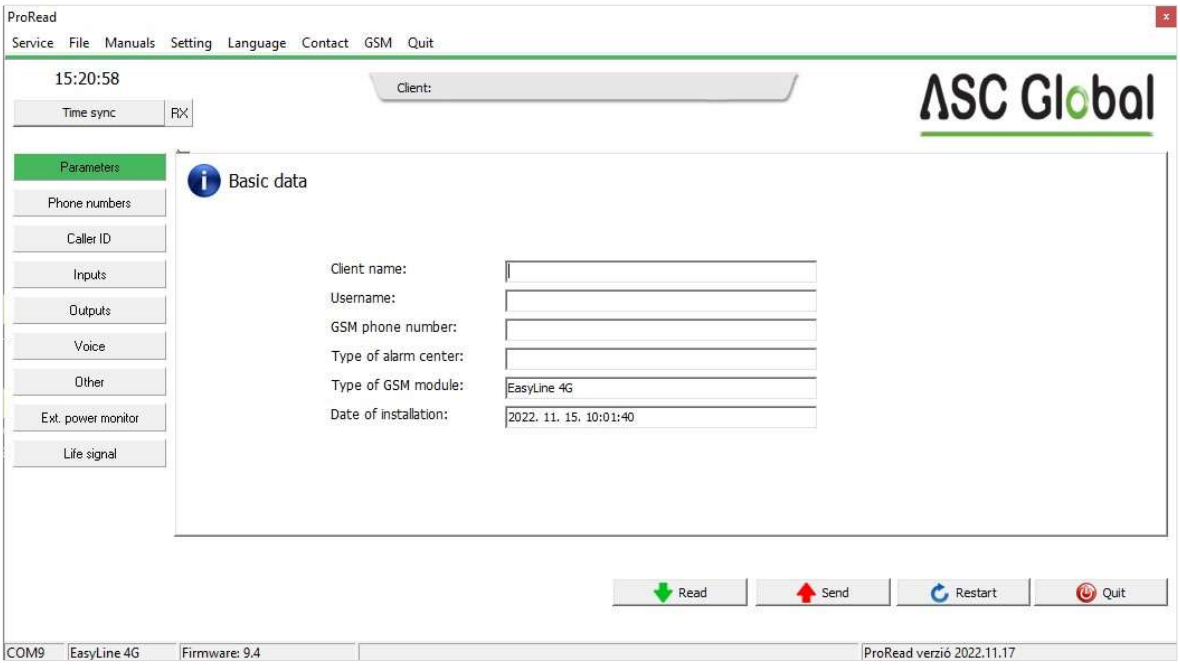
Connecting to the GSM/GPRS module



- Select whether you want to program the module via USB or Bluetooth connection.
- In the drop-down list below the language selection (COM9 in the picture) you can choose the port you want to communicate with the module programmer. You can find this value (for Windows operating system) under Device Manager -> COM port by selecting the connected programmer. If you can't find it, pressing the ***COM info*** button will jump to the Device Manager where you can find the required COM port.
- If the connection is successful you will see the name of the module in the product connection panel.
- By clicking the ***start*** button, the software will connect to the module and read its contents.
- Pressing the ***Start/Default Config*** button after connecting to the module will reset it to the factory defaults (the software will prompt you before doing this if this function has not been previously disabled).
- If you do not want to connect a module yet and only want to know the configuration options, you are free to choose in the ***Products - Trial*** window which module configuration options you want to know. It also gives you the possibility to pre-program the module.

The structure of the programme

- Elements of the top menu bar:
  - *Maintenance*: basic menu items with the menu items needed to maintain the module (e.g.: view module status, read event log, disable SIM PIN, update firmware)
  - *File operations*: save and load settings
  - *Descriptions:* View wiring diagram
  - *Settings:* adjust window size, disable confirmation questions
  - *Language*: select language (available languages: English, Hungarian, Italian, German, Slovak, Slovenian, Dutch, Czech, Finnish, German, Slovene, Romanian)
  - *Contact*: contact details, e-mail addresses, phone numbers



- A fülek segítségével váltogathat a különböző beállítási lehetőségek ablakai között
- On the main page (***Basic Data*** tab), click on the ***Synchronise Clock*** button to synchronise the module with your computer's clock.
- Once the device is connected to the GSM network, it will automatically synchronise with the service provider (if the network supports this service).
- The ***Read*** and ***Send*** button at the bottom is used to read and modify the configuration on the module. These buttons are available everywhere except the ***Control Phone Numbers*** tab. It is advisable to use the ***Send*** button after any major or major configuration. Before sending your settings, make sure that it does not cause an unexpected alarm. Before doing so, it is recommended to check the current status of the module (***Maintenance*** tab).

ATTENTION!

After connecting, always read the settings first if you want to change them!

- The **Restart** button allows you to restart the module. It is recommended to restart the device after monitoring.
- In the bottom menu bar you will find the following information:
  - Communication port number
  - GSM module name
  - Firmware version number
  - Note about the current software operation
  - ProRead software release number

Check the status of the module

The current status can be accessed by clicking on the ***Maintenance*** → ***Show Module Status*** button.

When you query the status of the module, you will get the following information:

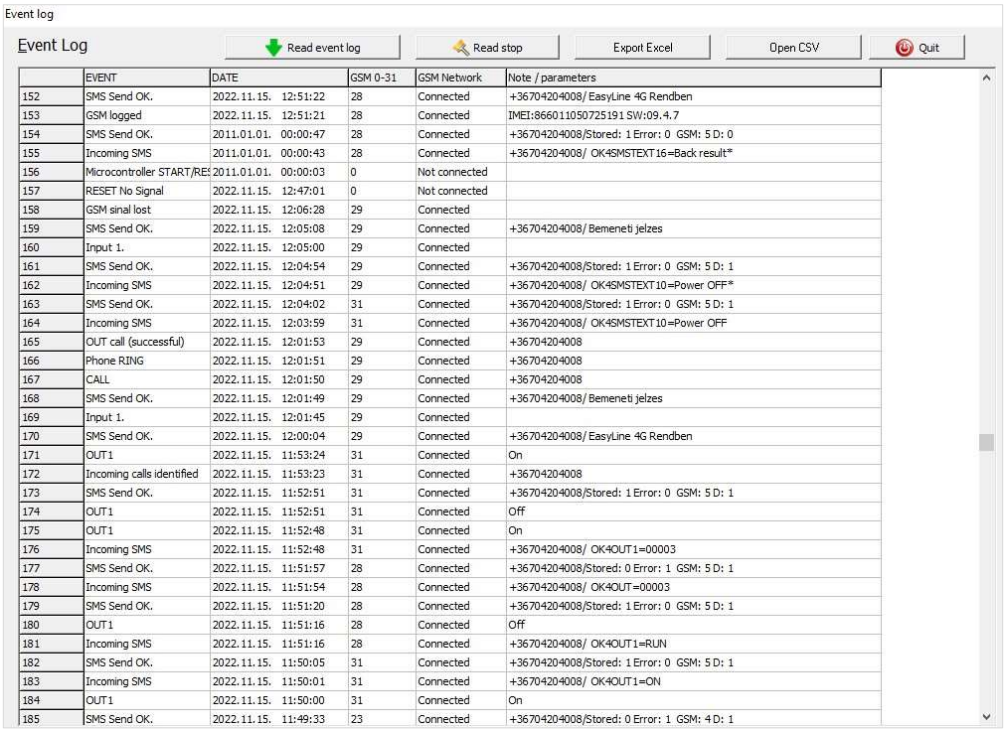
- Status of inputs
- Status of outputs
- Tamper sabotage signal
- Tamper indication
- External telephone line voltage
- Possible error/event indication (e.g. SIM card not inserted, SIM card locked with PIN code)
- GSM connection status (e.g.: Logged on, Roaming, No connection, Connection refused)
- Current GSM signal strength (updated every few seconds)

SIM card PIN code disabled

The PIN code request on the SIM card when it is inserted in the module ***must be switched off*** before it is inserted in the module.

- If this has not been done, you can do it by clicking on the ***Maintenance → Turn off PIN code.***
- The following window will appear where the software will perform the deactivation after the current PIN code has been entered.

Read the Event Log



	EVENT	DATE	GSM 0-31	GSM Network	Note / parameters
152	SMS Send OK.	2022.11.15. 12:51:22	28	Connected	+36704204008/ EasyLine 4G Rendben
153	GSM logged	2022.11.15. 12:51:21	28	Connected	IMEI:866011050725191 SW:09.4.7
154	SMS Send OK.	2011.01.01. 00:00:47	28	Connected	+36704204008/Stored: 1 Error: 0 GSM: 5 D: 0
155	Incoming SMS	2011.01.01. 00:00:43	28	Connected	+36704204008/ OK4SMSTEXT16=Back result*
156	Microcontroller START/RES	2011.01.01. 00:00:03	0	Not connected	
157	RESET No Signal	2022.11.15. 12:47:01	0	Not connected	
158	GSM sinal lost	2022.11.15. 12:06:28	29	Connected	
159	SMS Send OK.	2022.11.15. 12:05:08	29	Connected	+36704204008/ Bemeneti jelzes
160	Input 1.	2022.11.15. 12:05:00	29	Connected	
161	SMS Send OK.	2022.11.15. 12:04:54	29	Connected	+36704204008/Stored: 1 Error: 0 GSM: 5 D: 1
162	Incoming SMS	2022.11.15. 12:04:51	29	Connected	+36704204008/ OK4SMSTEXT10=Power OFF*
163	SMS Send OK.	2022.11.15. 12:04:02	31	Connected	+36704204008/Stored: 1 Error: 0 GSM: 5 D: 1
164	Incoming SMS	2022.11.15. 12:03:59	31	Connected	+36704204008/ OK4SMSTEXT10=Power OFF
165	OUT call (successful)	2022.11.15. 12:01:53	29	Connected	+36704204008
166	Phone RING	2022.11.15. 12:01:51	29	Connected	+36704204008
167	CALL	2022.11.15. 12:01:50	29	Connected	+36704204008
168	SMS Send OK.	2022.11.15. 12:01:49	29	Connected	+36704204008/ Bemeneti jelzes
169	Input 1.	2022.11.15. 12:01:45	29	Connected	
170	SMS Send OK.	2022.11.15. 12:00:04	29	Connected	+36704204008/ EasyLine 4G Rendben
171	OUT1	2022.11.15. 11:53:24	31	Connected	On
172	Incoming calls identified	2022.11.15. 11:53:23	31	Connected	+36704204008
173	SMS Send OK.	2022.11.15. 11:52:51	31	Connected	+36704204008/Stored: 1 Error: 0 GSM: 5 D: 1
174	OUT1	2022.11.15. 11:52:51	31	Connected	Off
175	OUT1	2022.11.15. 11:52:48	31	Connected	On
176	Incoming SMS	2022.11.15. 11:52:48	31	Connected	+36704204008/ OK4OUT1=00003
177	SMS Send OK.	2022.11.15. 11:51:57	28	Connected	+36704204008/Stored: 0 Error: 1 GSM: 5 D: 1
178	Incoming SMS	2022.11.15. 11:51:54	28	Connected	+36704204008/ OK4OUT=00003
179	SMS Send OK.	2022.11.15. 11:51:20	28	Connected	+36704204008/Stored: 1 Error: 0 GSM: 5 D: 1
180	OUT1	2022.11.15. 11:51:16	28	Connected	Off
181	Incoming SMS	2022.11.15. 11:51:16	28	Connected	+36704204008/ OK4OUT1=RUN
182	SMS Send OK.	2022.11.15. 11:50:05	31	Connected	+36704204008/Stored: 1 Error: 0 GSM: 5 D: 1
183	Incoming SMS	2022.11.15. 11:50:01	31	Connected	+36704204008/ OK4OUT1=ON
184	OUT1	2022.11.15. 11:50:00	31	Connected	On
185	SMS Send OK.	2022.11.15. 11:49:33	23	Connected	+36704204008/Stored: 0 Error: 1 GSM: 4 D: 1

You can open the event log by clicking on the ***Read log*** button in ***Maintenance → :***

- The GSM module can store the last 16.000 events in FILO (First in - last out) mode
- In the ***Signal*** column you will get a short information about the event.
- In the ***Date*** column you can see the time of the event (year, month, day, hour, minute, second resolution). IMPORTANT! The date will be accurate if the internal clock of the module is synchronized with the clock of a computer or the GSM network. The latter is done automatically by the module once it is connected to the network of the service provider.
- ***The GSM 0-31*** shows the signal strength value when the signal is entered. 31 is the highest value and 0 indicates a disconnected state.
- In the ***comment/parameter*** column, other extra information about the signal is entered.
- When opened the table is empty, to start reading it click on the ***Read Event Log*** button.
- In order, the most recent data will appear at the top of the list and older entries will appear in descending order.
- If you do not want to read the whole list, you can stop the reading by clicking on the ***Stop Reading*** button.
- The read list can be exported from the software as a "csv" spreadsheet (e.g. Excel) so that it can be easily sent and stored for later analysis.

Read out GSM signal strength

You can display a graph of GSM signal strength status as shown in the picture.

- To display the GSM strength, click on the *Maintenance → Display GSM strength.*
- Press the read button to read the values.
- The variation of the signal strength is displayed in hourly resolution. The elapsed time is read backwards according to this
- The vertical scale is 0 to 31, with 31 being the best field strength.
- You can zoom in on the diagram as you like using the left mouse button.

Fill in basic data

You can enter important information about the installed GSM module. In addition to the name and installation address of the client, you can also specify the phone number of the SIM card inserted in the module and the type of alarm panel connected.

- The data entered will be stored on the module
- Filling it in can be useful for future maintenance.

Enter the telephone numbers to be notified

In the Phone numbers menu, you can enter the numbers to which you want to send SMS and/or voice messages. **The numbers you enter here must be in international format to ensure reliable operation.**
(e.g.:+36301234567 or 0036301234567)

- You can enter up to 8 phone numbers to be notified.
- You can select these numbers in the rest of the program.
- You can also edit the list here via SMS with the command "TELx=Phone number", where "x" is the number of the phone number you want to edit.
- (Example: 1234TEL1=+36301234567, 1234TEL2=+36304564323)
- Read more under ***SMS commands***

Adding control phone numbers

- In the Control phone numbers window, you can specify which numbers should control your outputs.
- Phone numbers can be stored in the internal memory of the module (up to 1000) and you can also store additional numbers on the SIM card inserted in the module. Phone numbers on the SIM card can only be read out with ProRead.
- When using internal memory, the module will be independent of the memory contents of the SIM card inserted in it.
- Always read out the contents of the memory using the ***Read numbers from memory*** button before editing the list. To save, use the ***Write numbers to memory*** button and then the ***Send*** button.
- **The phone numbers entered must be in international format.** The +36 solution is recommended here (e.g.:+36301234567) due to the length of the number.
- It is also possible to save, edit and open stored numbers (.csv file).
- You can also assign caller numbers to specific outputs.
- You can also modify the list using the ***SMS command*** ADD=add ***phone number*** and DEL=delete ***phone number.***

(Example: 1234ADD=+36301234567, 1234DEL=+36301234567)

Input settings

The module has 1 *SMS* input. The type of input can be varied It can be connected to the *GND* point in Normal Close (NC) or Normal Open (NO) position. By changing the loop between the *input* and the *GND* point, SMS notifications or phone calls can be triggered to up to 8 telephone numbers. The SMS text and the phone number to be notified can be changed at any time by 1 SMS.

On the ***Input*** panel you can choose how the input should work:

- For Input, you can choose to have it open (NO - Normal Open) or closed (NC - Normal Close) by default.
- You can also request **an SMS notification to reset** the input state. The SMS text for the reset can be specified in the Other tab of the ***SMS text for input reset.***
- If **the siren tone is** selected, the voice call message will be a siren tone of 25 seconds, while if the voice message is also selected, it will be only 5 seconds.
- It is possible to set it so that the **call does not have to be recorded**. In this case, the module will not initiate a call again in case of a successful call, regardless of whether the call was actually answered or not.
- The ***SMS text*** field allows you to enter the content of the message, which can be ***up to 32 characters*** long.

After saving the input settings, restart the module to ensure that the settings work correctly.

Setting the output

In the ***Output*** window, you can make settings related to the outputs. The output type can be ***monostable***, i.e. single-state (switches for a preset time and then returns to the original state), or ***bistable***, i.e. two-state (returns to the original state only when a new control is activated). In case of **monostable operation**, you can specify the desired switching time in seconds or minutes. The maximum length is 65 535 seconds.

After saving the output settings, restart the module to ensure correct operation of the settings.

The output can be set by sending the following message:

1234OUT1= → Optional parameters: **ON**, **OFF**, **RUN** or switching for a given time (given in 5 characters)

Example: **1234OUT1=00003** → Control output 1 for 3 seconds.

Power monitor settings

The GSM device can monitor its own power supply and send a notification in case of a problem.

- In the Power Monitor tab you can set the voltage value below which the module will send an alarm.
- Further settings for this function are the same as for the inputs.

Setting for sending a live signal

Sending a life signal notifies the user that the system is running smoothly.

- You can set the interval at which the signal is sent (in days) and specify the time of day at which the signal is sent.
- To use this function, you must tick the box Send life alert!
- It is important to note that if you do not want to receive the first signal on the day of the setting, you can specify the number of days after which the module should send the first life signal notification.

You can modify the sending of the life message by using the following SMS command:

1234LIFETEST=cccsstttttttttt

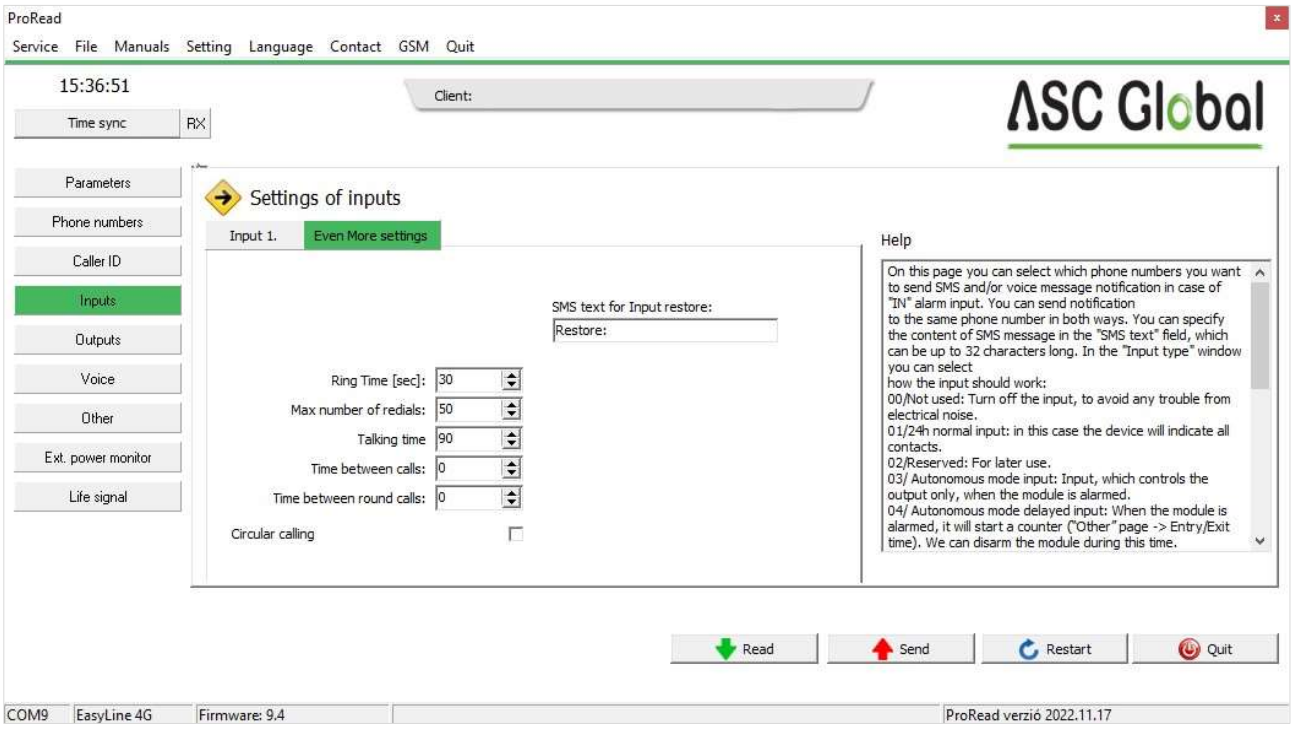
ccc → send cycle in days (e.g.: 007 days)

ss → what time of day to send the message

ttttttttt → Which phone number to send the message to (e.g.: 00100000 → send the message to phone number 3)

Other input setting options

Other settings for the module are available here.
The ***Other settings*** tab contains the following:



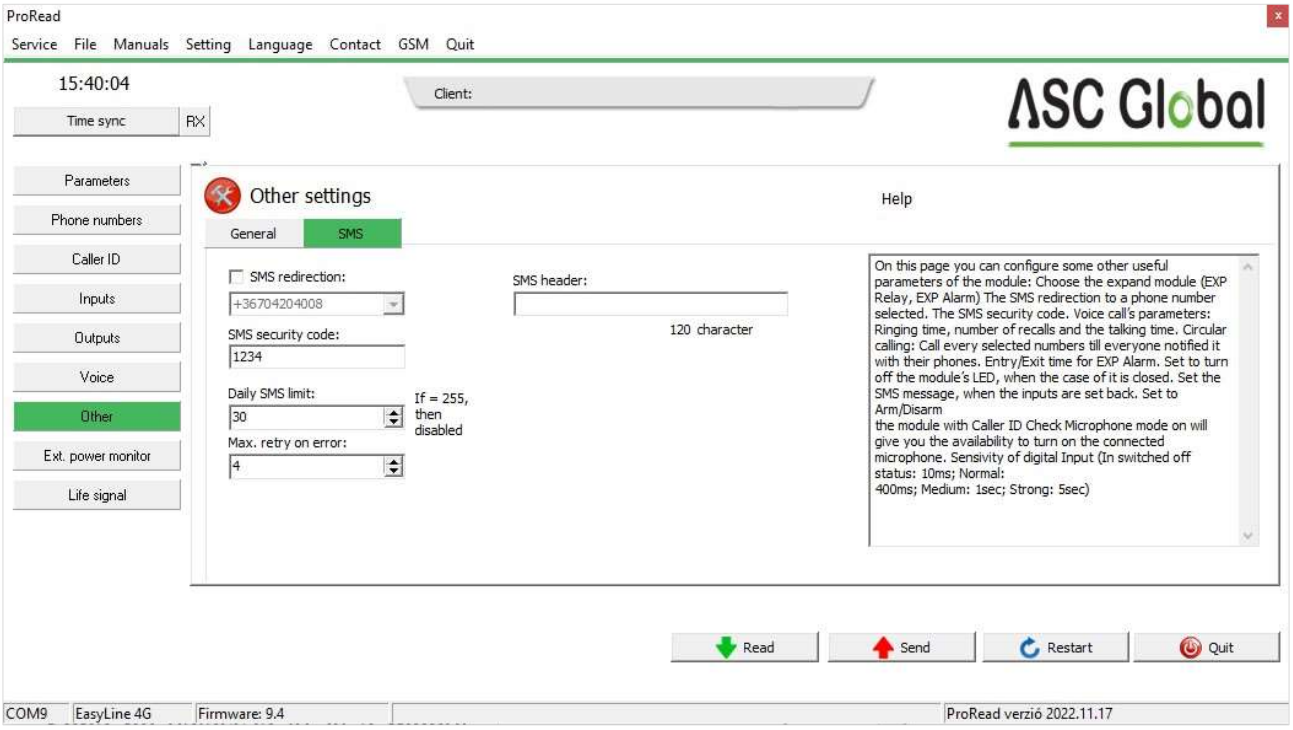
- Voice call parameters: specify ***ring and talk times, and the number of call repetitions***.

(SMS command: 1234RINGTIME=030 → 30 seconds ringing)

- By selecting the ***ringing function***, all selected phone numbers in the alarm must acknowledge the alarm.

The ***SMS*** tab in the ***Miscellaneous*** menu is as follows:

- Forward SMS to one of the 8 phone numbers to be notified. Attention! Never select the module's own phone number here!
- Do not select any of the following options.



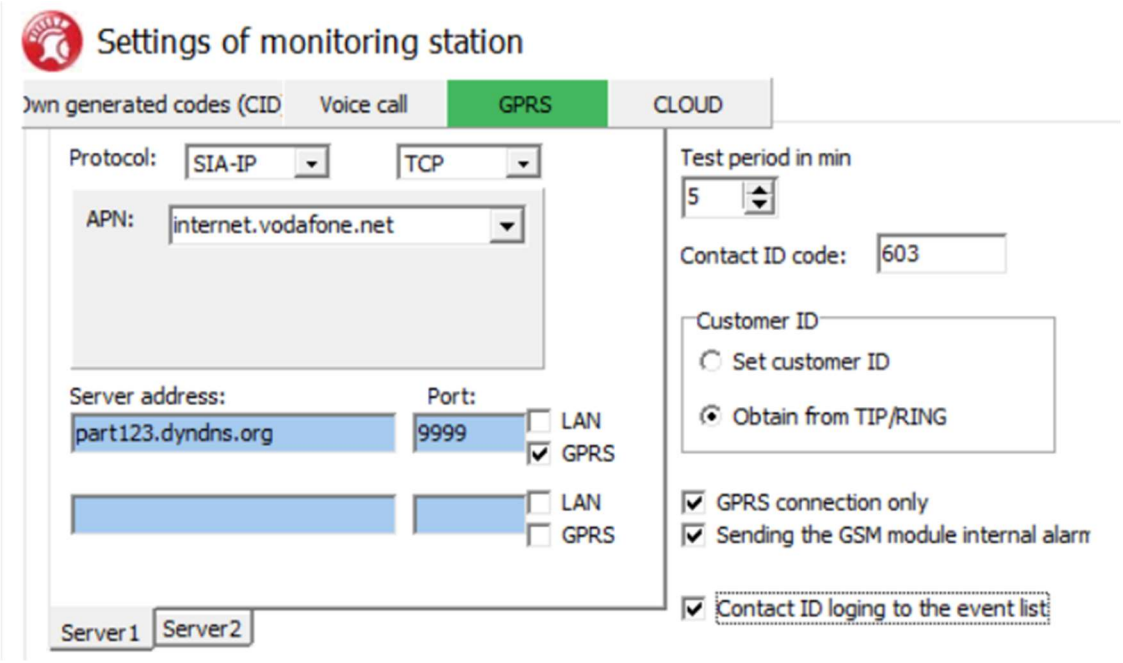
- Do not enter the SMS number in the SMS field: You can set the number of SMS messages the module can send in a day. This function can be disabled by setting the value to 255. If you set this limit to 0, the module will not send SMS!
- You can also set the maximum number of attempts to send SMS in case of failure.
- Forward SMS received by the module to a specific number to be notified. (SMS command: 1234REDIR=1...8)
- SMS header, the text of which will be placed before the text of all SMS.

GPRS settings

In this tab you can set the protocol to be used for information transmission. TCP and UDP can be selected.

In the latter case, the user name (user) and password (password) fields do not need to be filled in.

- The currently supported communication protocols are: ENIGMA and SIA IP
- When entering the server address, you can either enter an IP address or a domain name (in which case you need to configure a DNS server).
- Spare servers can also be configured for more secure communication.
- You can also set the frequency of sending test reports and, if you wish, provide a unique Contact ID code.
- For GPRS client code, you have the option to enter a pre-set code (entered on the remote control tab) in case it cannot be changed in the alarm control panel or to allow the use of a code taken off the line using Tip/Ring.
- When using "**GPRS connection only**", it is possible to ignore the notification route setting configured in the alarm panel, all information will be transmitted to the remote control receiver only on the GPRS connection.
- If the "Set client code" is selected for the client code, it will send all alerts with the client code entered in ProRead
- You can also enable the sending of your own signals (inputs, power monitor, tamper, life signal). You can enter the code for these in the Remote Monitoring tab.
- To use the GPRS connection for an alarm control panel, the panel must dial 4444



Mobile application description

Cloud Manager application is used to set and modify the operating parameters of the devices we sell. You can configure **GSM, IP and WIFI/Bluetooth control icons**, which can be operated via WIFI, Bluetooth and mobile internet**, depending on the device.**

EasyLine 4G Cloud module with the app:

- register the module in the cloud
- create a control icon to control the output in the "Control Panel" interface of the application
- When creating a control icon, you can specify the communication channel (Cloud, SMS), the type of control (monostable/bistable) and the time of control. The control button created controls the module based on the parameters set. If the control is successful, a pop-up window will indicate that the control has been executed, if it fails, a dialog window will open.

In the application, you can create an unlimited number of users for a device by entering user e-mail addresses.
What are the benefits of the application?

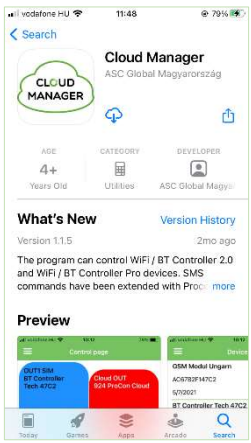
- Control with shortcut icon
- Output control time setting
  (monostable / bistable output setting option)
- Unlimited number of users can be created for a device by entering users' e-mail addresses
- Control electric gate, barrier or other contact controlled devices
- Device can be easily configured with the application, no need to configure complicated network settings (e.g. port forward)

Download the application

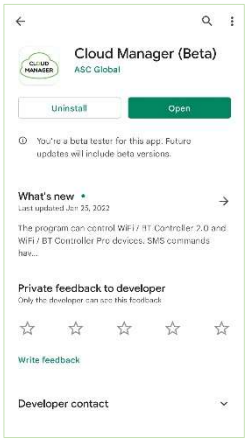
Find the Cloud Manager app in the App Store or Google Play Store and download it to your iOS (1) or Android (2) device.

Apple Store
Download

Play Store
Download



1.

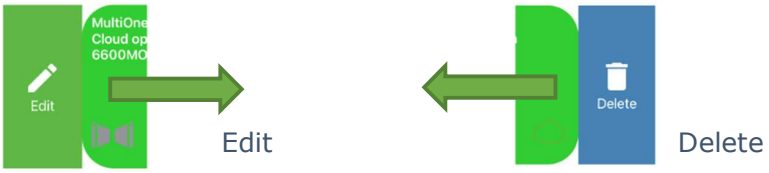


2.

Control Panel

When you open the app, the control panel displays the control buttons for all devices controlled by **Bluetooth, Cloud connection** or **SMS** commands you have created so far.
To create an icon *(explained later)*, you need to specify the icon name, colour, icon, control type, control duration and connection type. In case of an Internet connection, the e-mail and password set on the server during installation or afterwards are required. You can customise the name, colour and icon of the control buttons from the list offered.

You can drag **the button** left and right **by holding your finger on it.**
Drag right to edit, **left to** delete.



Slide permission

Sliding the control icons brings up an icon editing menu, which you can toggle OFF/OFF in the settings menu.

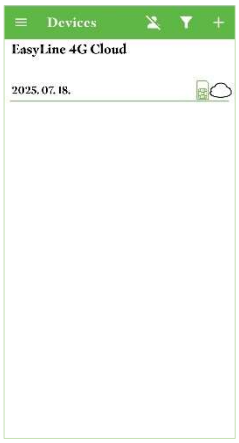
Control button information

Information displayed on the control knob:

- **Function button name** Unique name of the device or function to be controlled
- **Location name** (name entered at registration)
  This name is used for easy identification when using multiple devices
- **Identification number** Depending on the device type, the module identification number is displayed

Pressing the control button activates the output control. If the control button is set to Cloud connection, the e-mail address identified in the control will be displayed.

Tools

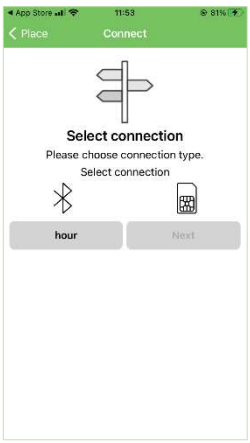


In the Tools menu you will find the tools already registered.
In the device row, **Bluetooth, Cloud** or **SMS** connection icons indicate the possible connection methods. A green colour indicates an active connection. Bluetooth icon is green if the device is in the phone's Bluetooth list. The Cloud icon is active if a user is logged in. Several icons can be green at the same time.
If you do not have a device registered, you can add it by pressing the "+" button.
In the top menu, you can enter your e-mail address and, once logged in, the data of the devices corresponding to the user's authorisation will be downloaded to the phone.
If you already have a list, you can also filter by serial number and location.

Add device

To add a device, name the location after pressing the "+" button.

You can give the location of the device a unique name to help identify the control device (e.g.: holiday home, gate)

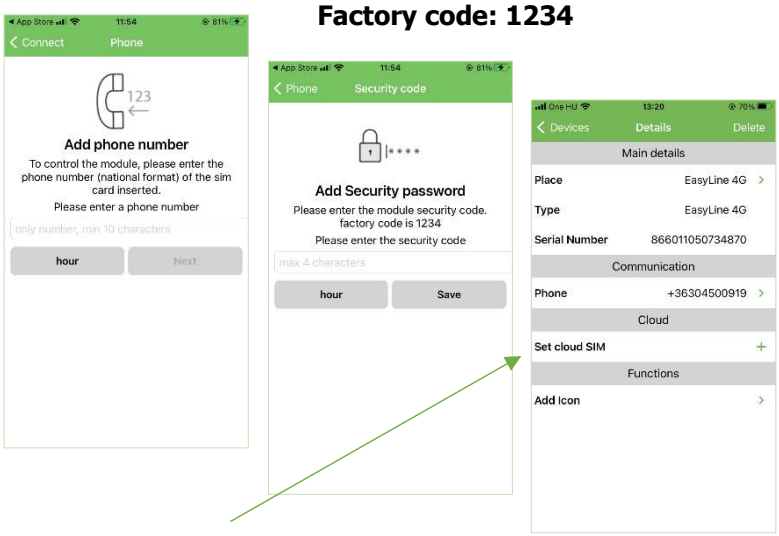


Select the channel on which you want to connect to the module.
In case of EasyLine 4G Cloud, select the SIM setting!

Enter the calling number of the SIM card inserted in the control module in international format (e.g. +36301234567).

Enter the security code of the module.

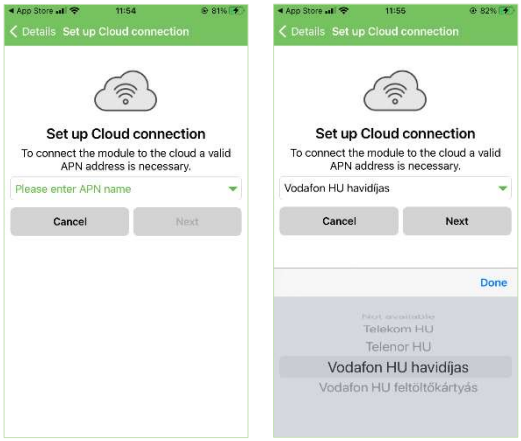
Factory code: 1234



Click on the Save button and the device will appear in the list.

Cloud setup

Click on the "SIM cloud setup" menu.



Select from the options offered to set the APN of the mobile network provider of the inserted SIM card. For domestic providers (Hungary), the application will offer the available APN options. You can choose the right setting according to your subscription or tariff plan.

Example:

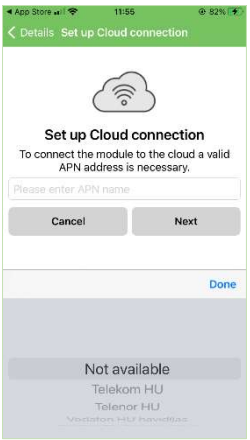
- **Telekom HU** (internet)
- **Yettel HU** (online)
- **One HU monthly** (internet.vodafone.net)
- **One HU with top-up card** (vitamax.snet.vodafone.net)

APN: Access Point Name

With SIM cards purchased from different providers and inserted in the modules, we can connect to the Internet using these addresses (APN). Usually these addresses vary from provider to provider and may depend on the current tariff plan offered by the provider (top-up card or subscription).

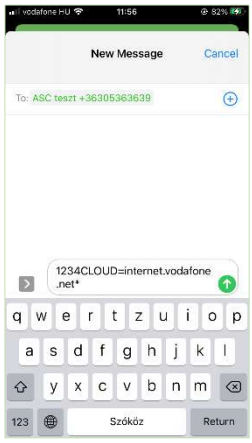
If you connect with a home SIM card to a provider in another country, the APN option offered by your current provider will not appear in the list, so you can select a custom field in the app to set it up. **"Not in list"**

When using a domestic SIM card outside of the domestic network, the current foreign APN provider may charge a fee depending on your choice!



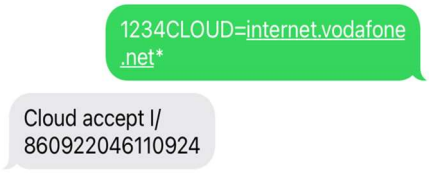
Continue APN setup

The application will generate an SMS message to the caller number you have entered in the application to send the SMS command to connect the module to the cloud.



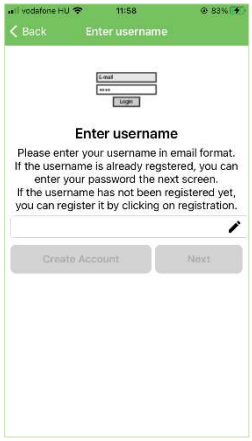
Press the send button.

After sending the SMS command, you will receive a confirmation SMS with your IMEI number (860922046110924).



Copy the whole message and paste it into the Cloud Manager application field.

Enter your user email address ... (1)

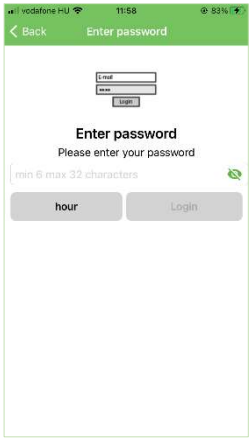


1.

The application will read the IMEI number from the message (2)

2.

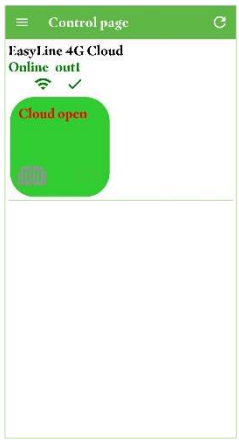
... and the corresponding password. (3)



3.

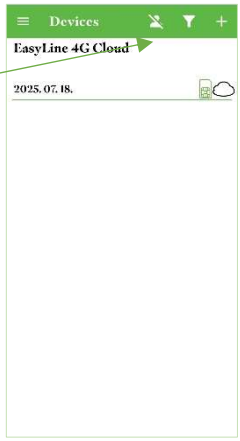
With this e-mail address you will be able to access the module in the cloud as an "admin" authorized user.
After a successful save, you will be able to log in with your user account to www.ascloudmanager.hu where you will find your registered devices.

Create a cloud control icon



With a successful cloud registration you can create a 'cloud' control icon for remote access in the Cloud Manager Application.

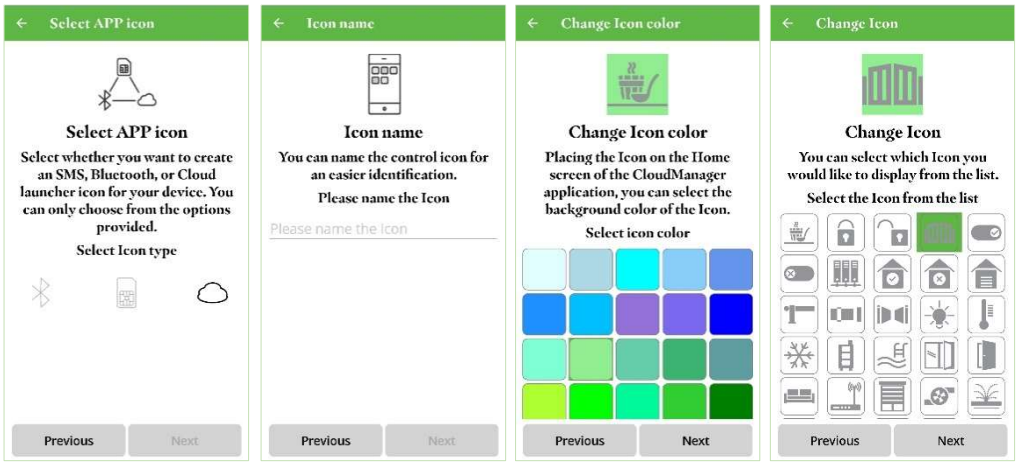
Verify that you are logged in to the application with the email address you entered in the **Tools** menu.



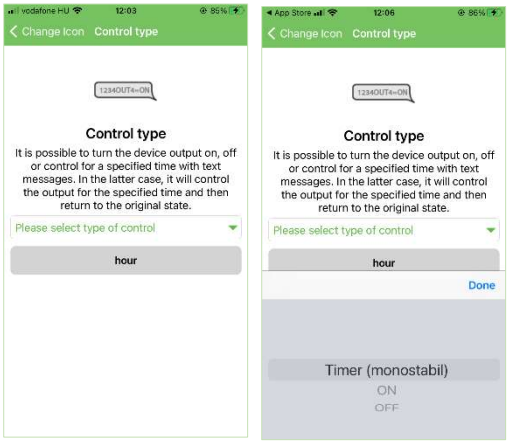
If not checked, log in with  the email address and password already provided.

After a successful login, you will see your device or, in case of multiple registered modules, all available devices will be displayed in the list.

Click on the row of your device to see its details, select the Create icon menu item. Use the "+" sign to select the Cloud icon to create the control button (1)



Name the control icon (2), then specify the background color (3), icon of the control icon. (4)
Set the control type and duration.



Control type can be:

Timing (Monostable)

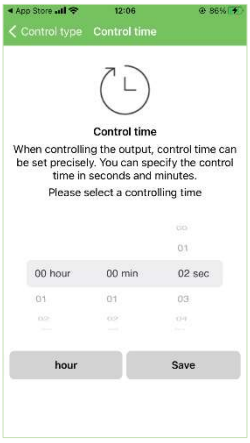
Controls the output for the time period set in the device.

Switching (Bistable)

When an output is activated, the output is toggled and remains in that state until it is controlled again.
In monostable control, you can specify how long the control should occur.

You can specify the time of control by selecting hours/min/sec.

Maximum selectable control time:



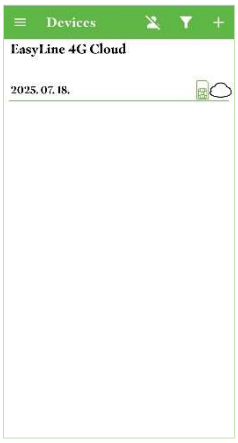
18 hours, 12 minutes and 15 seconds, i.e. 65535 seconds.

Once set, the control icon will appear in the icon list and on the Control Panel.

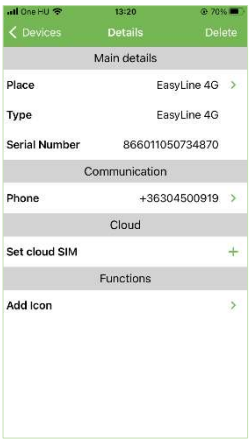
The control icon created can be used to activate the output of the EasyCon 4G Cloud module.

Device settings

In the Device menu, click on the device row to get a detailed insight into the operational settings and the connection status of the module.



Depending on the device, services and menu items may vary.



Basic information

Location

The name of the device is displayed, which can be changed at any time.

Type

The name and type of the connected device.

Communication

Phone

You can enter the call number of the SIM card inserted in the GSM module in international format (+36301234567).

Bluetooth

If you connect a WiFi/BT Programmer to the RS232 connector, you can pair it with the module here.

Cloud

SIM cloud setting

Access Point Name - Access Point Name
With SIM cards purchased from different providers inserted in the modules, we can connect to the Internet using these addresses (APN). These addresses usually vary from provider to provider and may depend on the current tariff plan offered by the provider (top-up card or subscription).

Features

Create an account

Click on "Create icon" to create control icons in the application.

Settings

Customise home page

You can choose to display the **tools on** the start page or **the control icons** directly when the application is launched.
Click Save to open the app the next time you start it according to your settings.

Style

Select theme style. You can choose whether you want to use the app in a **dark** or **light** style. Click Save and the app will immediately set the desired style.

Slide permission

Slide the control icons on the home screen to quickly access the icon to modify or delete it. This slide can be disabled, allowing you to modify or delete icons from the tools menu.

Language

By default, the language of the application is displayed according to the settings you made when registering and you can change it here from time to time.

Status update

On the control panel, you can enable the feedback of the current status recorded on the server to the control buttons.

Display order

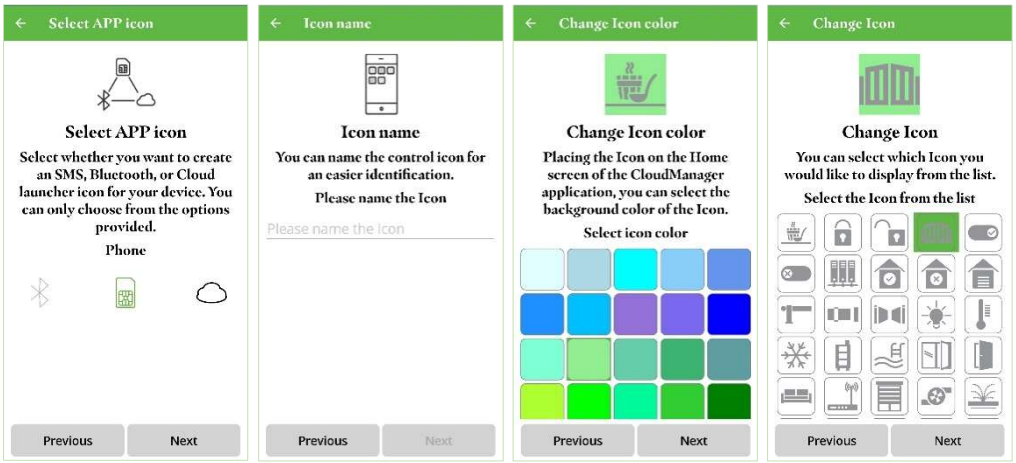
From the options offered, you can set the order in which devices and icons are displayed.

Help / Bookmark

Contains the current version number of the application, the date it was created and a link to www.ascloudmanager.com.

Create SIM icon

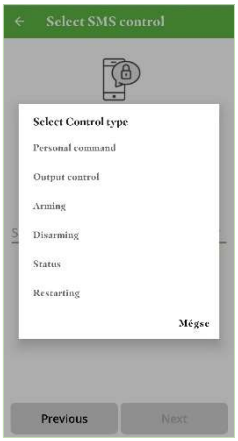
Click on the Create icon menu. After pressing the "+" button, select the SIM icon and then click on the "**next**" button to enter the **name of** the **control icon.** Next, you can define **the background colour of** the **control icon.** Click on "**next**" to select **the icon you want to** display from the list.



Depending on the device, choose between outputs and control types!

The control type can be:

- **Personal command**
  For SMS control, you can enter the SMS command for any SMS controlled module to control the output. This will create a control icon on the Control Panel, which you can click on to be redirected to the mobile device's SMS sending interface, where you can send the custom command.
- **Output control**
  to set the output control defined in the device
- **Arming / Disarming**
  used to arm / disarm the module in case of alarm function
- **Status**
  The current information about the module is displayed
- **Restarting**
  The module can be restarted as if it had been switched on and off.



For **output control**, if your device has multiple outputs or is connected to one or more expansion modules, you can select which output you want to control. You can control each output with a separate SMS command.
Depending on the device and expansion module, you can choose between different control types.
Control types:
ON, OFF, By setting (set in device), Timing (monostable)
Once set, the control icon appears on the Control Panel. Pressing the control icon will display the SMS command ready to be sent, which will be sent to the device and executed by the control.

WEB - ASCloud Manager description

You can access and control our EasyLine 4G Cloud module via the website www.ascloudmanager.hu. The web interface can be accessed with the e-mail/password pair entered in the mobile application.

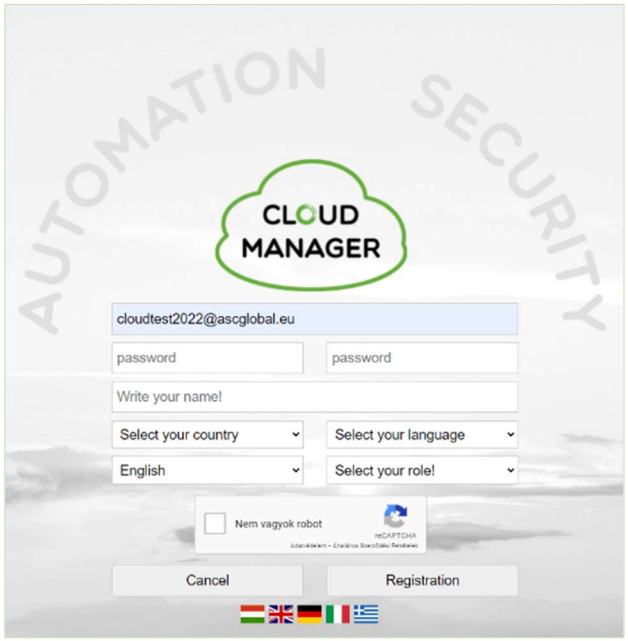
IMPORTANT!

For cloud programming, please preferably choose a time when the possibility of GSM call control is at its lowest.

During cloud read/write, if a GSM call is received, the module will suspend data connection tasks and resume them after the GSM call. The expected time for this will vary depending on the signal strength provided by the antenna connected to the module and the quality of the data connection used on the SIM card (30 sec - 5 min). Thanks to improvements, it is now possible to add a control phone number without having to wait to write/read the entire 1000db control phone number, if you know how many control numbers you want to save/read, using a block one larger than that, when you stop the data is written/read anyway, so there is no need to wait for the entire data file. This significantly shortens the time it takes to do this.

Register on the ASCloud Manager website

Create a user account at www.ascloudmanager.com.

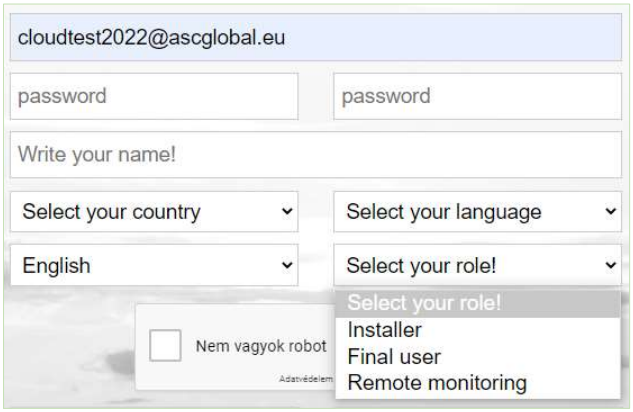


- Enter an email address to login
- Enter the password you want to use for the email
- Confirm the password again

Select your native country and language from the list, then select the language you want to see the website in when you log in.

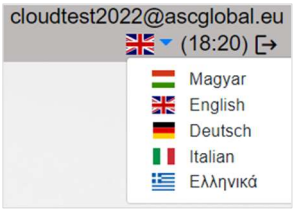
Select the type of user:
- Installer
- End user
- Remote monitoring station

Click the Register button to go to the main page.



The page automatically logs out after 20 minutes of inactivity. You can see the current time in the top right corner of the screen.

Select language



Use the drop-down menu to change the language of the page. You can change the language of the page after logging in. The website is currently available in 5 languages, but will be extended continuously.

Create your first cloud connection

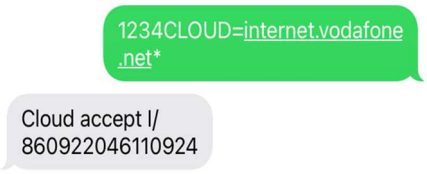
To create your first cloud connection, follow the steps below to register:

- Insert a SIM card in the module and wait for the network connection.
  When you have successfully registered, the green LED **on the module** will flash 3 to 5 consecutive times.

NOTE! Make sure that the inserted SIM card has an active GPRS connection and sufficient balance to send SMS. Make sure that PIN code request is switched off.

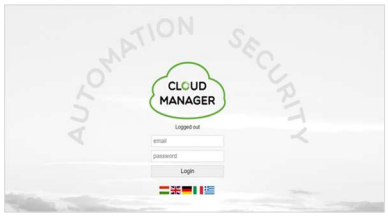
Send SMS as follows: **<PASS>CLOUD=<APN>***

PASS: Security code of the GSM module (default: 1234)
APN: SIM data network APN (e.g.: "internet", "net"... etc.)



After successful registration, we will receive a reply SMS with the IMEI number of the registered device.

Please go **to** www.ascloudmanager.com and enter the IMEI number of your gadget as shown below:

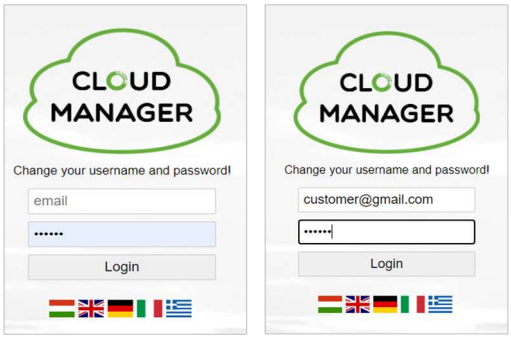


E-mail: **<IMEI>@gsm0.eu** e.g.:860922046110924@gsm0.eu

Password: **<IMEI>** e.g.: 860922046110924

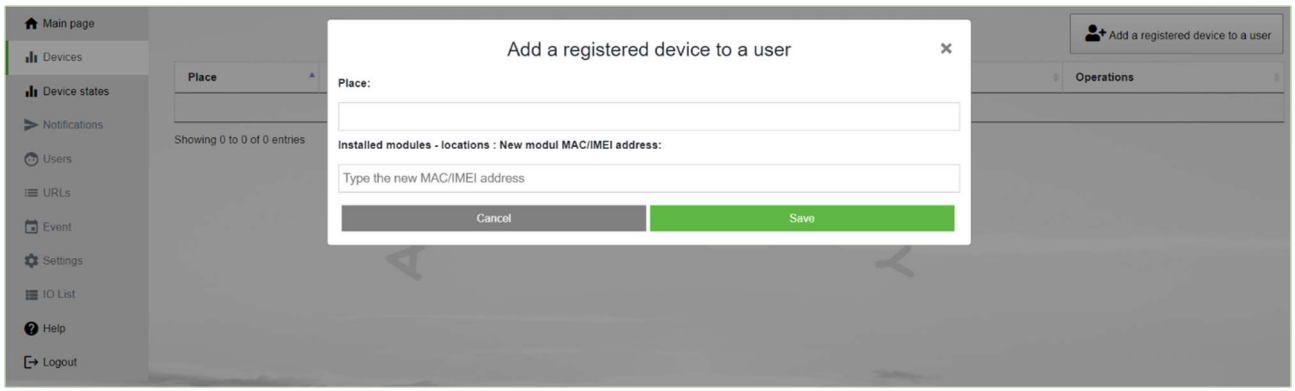
Enter the login e-mail address and associated password to register the device.

After successful registration our GSM module will be available in ASCloud Manager.



Add a registered device

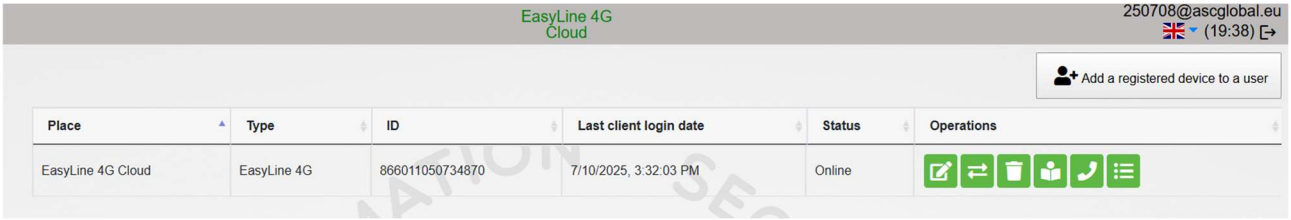
On this page, you can add a brand new device to your account by sending a registration SMS or add an already registered module to the list.



Location: enter a name for the new module (street, building, other identifier to easily find your device later)
Installation location: if you have more than one module, the names of the devices you have used so far will be displayed here. This is important because when you enter a new name, you will be warned if you want to create a module with the same name, but it is also useful if you want to connect a new device to another one to create a similar name.
New module IMEI number: enter the IMEI number of the new device here.

Log in at

After logging in, a list of modules corresponding to your entitlement will appear with some basic information. A drop down menu allows you to change the language setting of the page. The language of the page can be changed after login.



Operations

1. 2. 3. 4. 5. 6.

1. Set the device name
2. Replace device
3. Delete device
4. Settings
5. Control phone numbers
6. Event log (GSM module)

1. Set **device name**

Changing the name of a device allows easier identification if you have more than one device.

2. **Replace device**, in case of failure all settings and users will be transferred to the new device

3. **By deleting the device,** all access can be terminated. The device will no longer be available in the cloud.

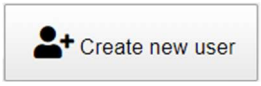
4**. Settings**

5. **Control phone numbers** You can program up to 1000db control phone numbers stored in the internal memory.

6. **Event log**, here you can read GSM calls and SMS sent and additional connection information **stored in the GSM module** and export/import them in Excel file format.

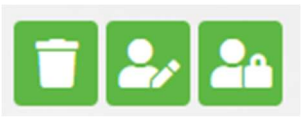
Create users

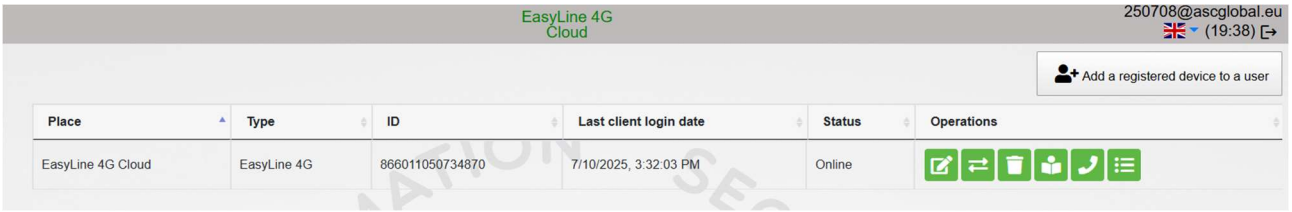
You can assign users to your device by entering a user email and password, to whom you can assign different privileges for output control. The ProCon 4G Cloud module has one output and can be extended with 3 additional outputs by connecting an EXP3 relay, which can also be controlled at will after user rights management.



User privileges

You can edit the access of your users, assign different privileges. We can modify or change their password, and when access is no longer required for a particular email address, we can simply delete it with the appropriate symbol.

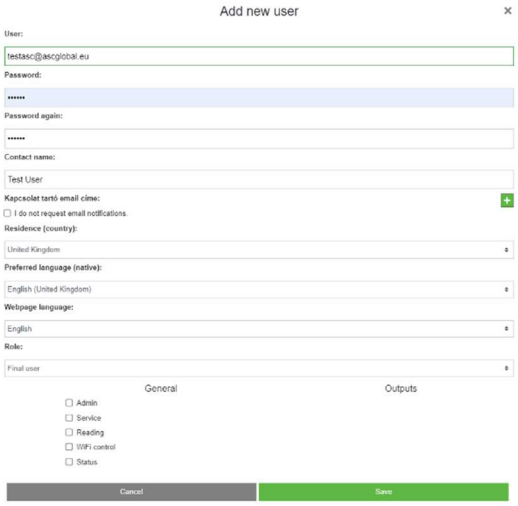




Admin: administrator privileges.
It has virtually all permissions except for deleting the user who created the permission.
Service: Allows access to service data related to the operation of the module.
Reading: Can be used with read-only rights

WIFI limit.

This function allows the user's privileges to be suspended. Once the setting is turned off and saved, the user can access his account again.

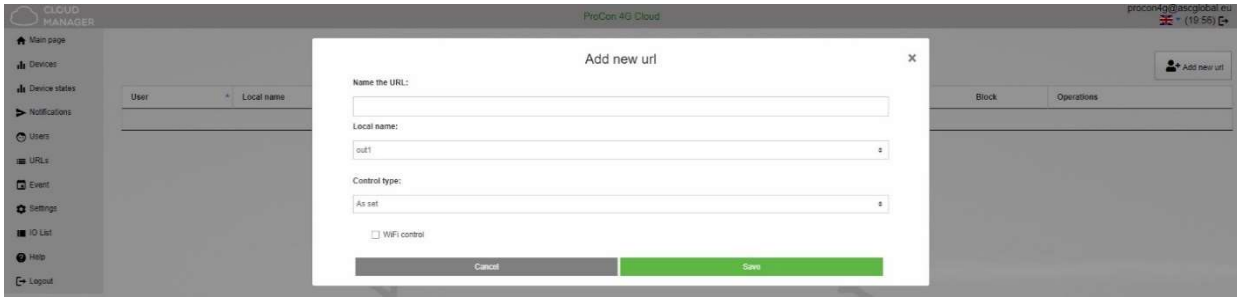


Change user password

With just a few clicks, you can change your own or your users' login password.

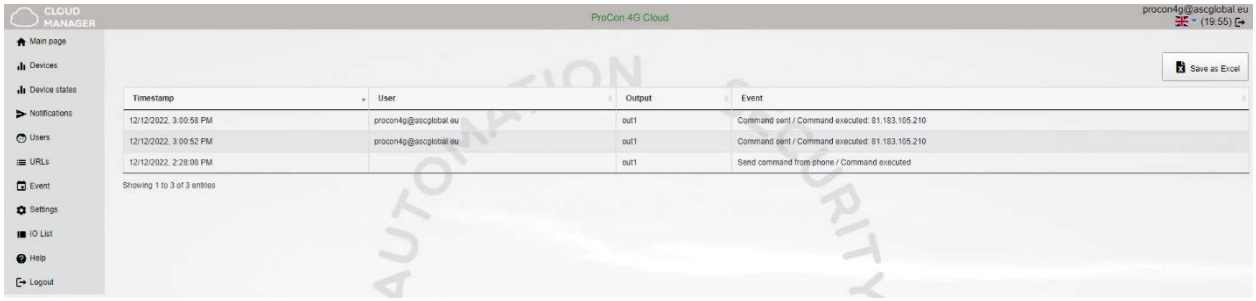
Create URL control icon

Under URL menu, click Add new URL to create a desktop PC control icon.Give a name to your control icon, specify an opening time in seconds, here you can also limit the user's access by checking the "Wifi limit" function. Left click and drag it to our screen and the URL will now operate the device connected to the output. We can edit our existing URL connection.
If we no longer wish to use this user access, we simply delete it with the appropriate symbol.

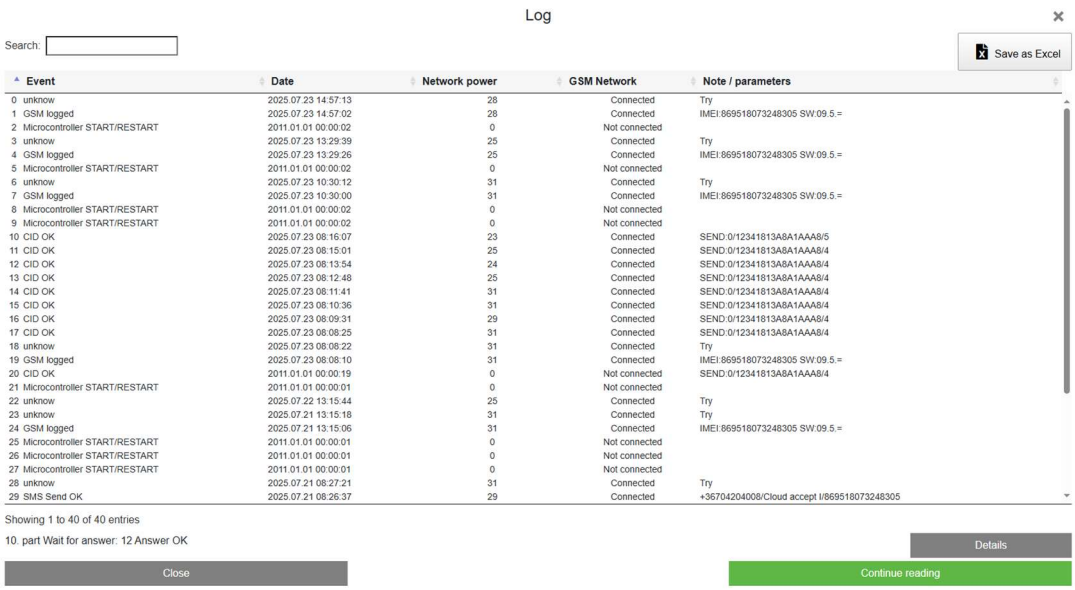


Event log

The event log menu allows you to list **user activity on the Internet.**
We can save our event log as an XLS file.



You can also list **the GSM event log of** the EasyLine 4G Cloud module by selecting the "Event list" menu item in the "Tools" menu. Here you can read all GSM based information, which can also be saved in Excel format.



Device status

Place	Type	ID	Status	Status date	Last client login date
EasyLine 4G Cloud	EasyLine 4G	866011050734870		7/10/2025, 3:41:01 PM	7/10/2025, 3:41:01 PM

You can view the current status of the outputs or inputs of your device.

The green colour indicates the status of the online cloud connection of your registered device.

The device is ONLINE

Green indicates a dormant state. As the cursor moves closer, the name you entered is displayed. When the colour changes to red, an "Offline" message is displayed. The device is OFFLINE.

You can see the output and input status of the module.

BEMENET (IN-/IN+) at rest (no DC voltage on the terminals)

OUTPUT at rest (C/NC closed, C/NO open)

Mobile network connection

BEMENET signal change (DC voltage on IN- / IN+ terminals)

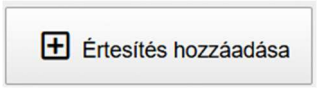
KIMENET activated (C/NC open, C/NO closed)

Notifications

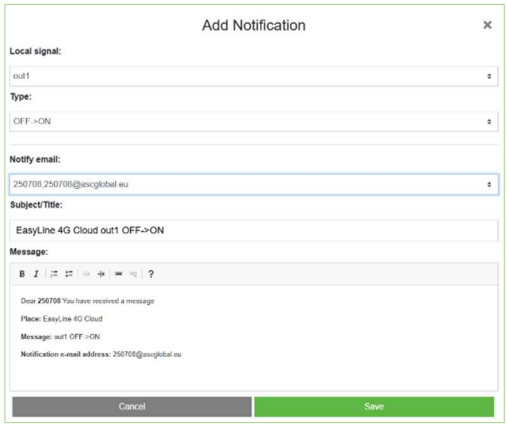
Two types of notifications can be selected:

- system notifications, usually containing important messages about the server, development or any system

- status notifications, where you will receive email notifications of selected controls and changes to the conditions to the email address you also select.



Press the "**Add notification**" button.



Local signals

You can select the output or input of the module depending on which change you want to be notified about.

Types to specify the direction of the output change.

OFF->BE Send notification when ON

ON->KI Notify on OFF

E-mail to be notified

Select the e-mail address to which you want to send the notification. You can also personalise the message and the subject field.

NOTE!

After registering, you may not see your email address in the list or the email address to which you want to receive notifications. If this is the case, select the email address you want from the Users menu and add the email address you want to be notified to your email preferences. After saving, log out and then log back in at www.ascloudmanager.com and you will be able to access your account.

Continue to set up notifications to your desired email address.

Settings

Information

This menu provides information about your device, depending on your rights and the type of module you have.

Name: name assigned to the device

Identifier: Not used

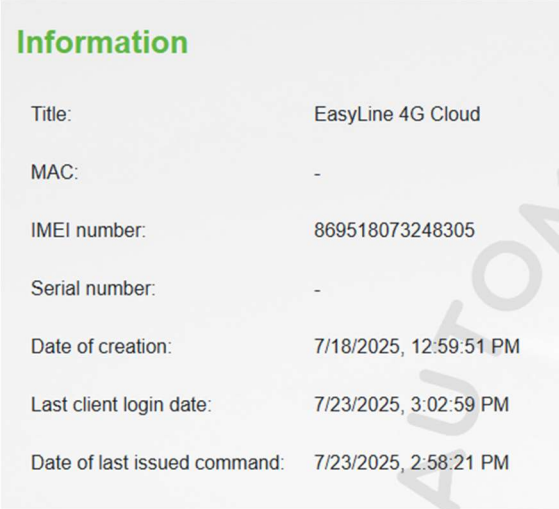
IMEI number: IMEI number displayed for ProLine 4G Cloud module

Factory number: for a specific module, the production number of the module

Creation date: Date of registration

Last logon date: last logon date

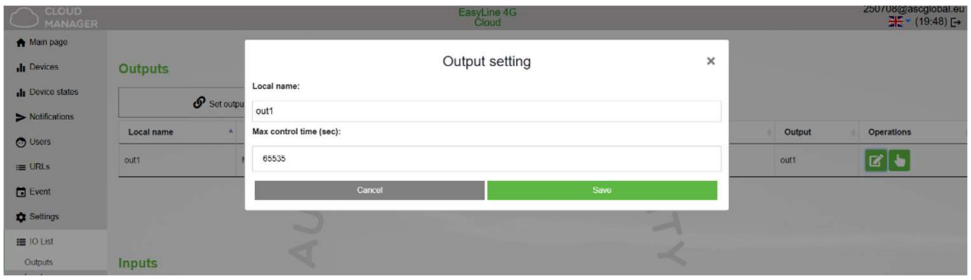
Last issued command date: date of last output control



Command sent

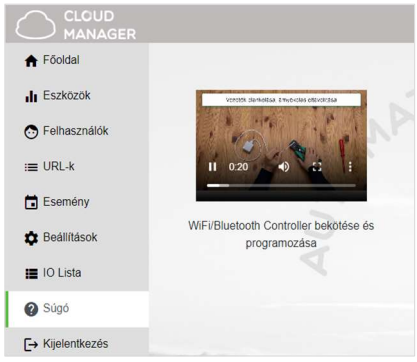
With the push of a button, you can reboot your ProLine 4G Cloud module.

In the **IO** menu you can view and set output connection data. Use the pointer finger icon to control your output.



Help

Click on Help for help in the form of an uploaded video.



The data management

Manage the data you enter in the application. Users can use the system with an email address/password, so it is necessary to enter these in order to operate the system. Users' consent to data processing by providing their personal data directly or indirectly is deemed to be given voluntarily, unambiguously and expressly. The purpose of the processing is to grant access to the system and thus the right to use it to users who wish to use it.

The system stores readable only the e-mail address, with password and installation location encrypted on the manufacturer's server. Only the installation location is stored in the memory of the module. The personal data are not accessible to third parties other than the manufacturer, installer, who are obliged to treat the personal data confidentially, in accordance with the applicable legal requirements, and not to disclose them to third parties.

Responsibility of the Manufacturer

The Manufacturer shall assume any liability in connection with the operation and use of the system, including the proper use of the hardware and software, in accordance with applicable law. The Manufacturer shall not be liable for any damage resulting from: the loss or theft of the user's control device or personal data referred to above, which allows unauthorised persons to access the system; the user's choice of a simple or easily crackable password; the **user's wilful, good faith, direct or indirect transfer of the personal data necessary for the use of the system or the control device to a third party.**

Programming by SMS commands

You can program the device by sending up to 1 SMS. The SMS text must always start with the security code. Commands can be comma-separated, so you can change several parameters at once. The length of an SMS command must not exceed 160 characters.
The list of commands is as follows:
Example of programming with the SMS command:
1234SMSTEL=06301111111, TELBE=06302222222, OUT=003, SMSPIN=1234, 1234ADD=+ 36301234567*
The new EasyLine 4G module has internal memory, so there is no need to save to the SIM card. Save your control phone numbers to the internal memory.
After successful programming, the module will send back an SMS with the following text:
"Stored:1 Error:0"
If there was an error in the programming SMS, the following text is returned:
"Stored:0 Error:1"
If you don't want to receive this message, use the ***NOSMS*** command or the ***RECALL*** command, after which the module will call to indicate successful programming.
Criteria for commands:

- must not contain accented characters
- all characters in the command are capital letters
- commands must be separated by a space
- # may be used instead of the equal sign.
- messages must always start with the security code, followed by the first command without a space (the second command must be preceded by a space).
- the SMS text command must always be terminated with *

Description	SMS command		x value		= value after signal	Example
Rewrite SMS security code	CODE			=	new security code	**1234CODE=4321**
Clock setting (by default, it is automatically updated when you connect to the mobile network but can be set if the network does not support it. Keeps manual settings after network update or until next reboot	CLOCK			=	éévvhhnnóópp yyyy: year, hh: month nn: day, h: hour dd: minutes	1234CLOCK=2507231540 The date will be: 2025. 07. 23. 15:40
Enter phone number for caller ID	ADD			=	Phone number (with +36)	**1234ADD=+36305551234**
Delete phone number from caller ID list	DEL			=	Phone number (with +36)	**1234DEL=+36305551234**
Add/change phone number to be notified	TEL	x	Telephone number serial number 1 to 8	=	Telephone number (with +36)	**1234TEL1=+36305551234**

Input setting	INPUT	x	Input	=	tnneeeeeeee t: 0 → off or 1 → 24h normal, nn → NO or NC eeeeeeeeee: other parameters 1.e =1 → send SMS about reset 2.e =0 → Mandatory 0 3.e =1 → Siren sound 4.e =1 → Voice message 5.e =1 → Remote monitoring 6.e =1 → Do not answer when calling 7.e =1 → DTMF acknowledgement (#) 8.e =0 → Mandatory 0	**1234INPUT1=1NC00100000** The input should be: - 24 hours normal - Normal Close - No SMS about reset - Play siren sound when calling - No voice message - No remote monitoring notification - Mandatory recording on call - DTMF acknowledgement not required
Output setting	OUTCONF	x	Output	=	iiiiirhn iiiii → if 00000, then it will be bistable, otherwise the control time in seconds r → always 0 h → control on call n → = 1 → No caller ID	**1234OUTCONF1=00003010** Output should be in monostable mode for 3 seconds, be controlled by call and caller ID should be mandatory on call.
Sending a live signal	LIFETEST			=	cccsstttttttt ccc → cycle time to send message at what interval (e.g.: 030 days) ss → how many hours on a given day (e.g. 12 hours) ttttttttt → which of 8 phone numbers to send to e.g.: 00100000 → phone number 3, 01010000 → phone numbers 2 and 4 ... etc.)	**1234LIFETEST=0071100100100** - every 7 days - at 11 o'clock - send to phone numbers 3 and 6
Setting up the sending of notifications	SEND	x	1: input 10: power monitor 12: life signal	=	sssssssssvvvvvvvvvvvvvvvvvvvvvvvv ssssssss → select phone numbers to be notified to send SMS (0 or 1) vvvvvvvvv → select phone numbers to be notified for calls (0 or 1)	**1234SEND1=0010000011000000** SMS notification to phone number 3 Call notification to phone number 1-2
Enter/change SMS text	SMSTEXT	x	1: input 10: power monitor 12: life signal 16: reset text	=	SMS messages closed with * The text must not contain accented characters!	**1234SMSTEXT1=message text***
Forwarding incoming SMS messages	REDIR			=	Serial number of telephone number to be notified 1 to 8	**1234REDIR=2**
To cancel the forwarding of incoming SMS messages	REDIR			=		**1234REDIR=0**
Set ringing time	RINGTIME			=	001 to 255 (in seconds)	**1234RINGTIME=030** 30 seconds ringing time
Request module status information	INFO	Instructions				**1234INFO**
No reply SMS after programming SMS	NOSMS	Instruction				**1234command1 command2...** NOSMS

Output control	OUT	x	Output number	=	ON → On OFF → Turns off RUN → control according to setting sssss → Control output for specified time (in seconds)	**1234OUT1=ON** Output ON **1234OUT1=OFF** Output is switched off **1234OUT1=RUN** Output control by setting **1234OUT1=00003** Output on for 3 seconds
Module reset	RESTART	Instruction				**1234RESTART**

SMS command example :

Message 1: Set input and 3. to notify phone number to be notified. Send SMS and voice message to the 3rd phone number.

5384TEL3=+36201255335 CLOCK=2507231540 INPUT1=1NO00100000 SEND1=0010000000100000

The content of the SMS is as follows:

5348 → SMS security code, all new SMS must start with this code (to change it use the CODE command. Default code: 1234).

TEL3= → Enter/change phone number 3 to be notified. Enter the phone number in international format.

CLOCK= Change the date to the next one: 2025. 07. 23. 15:40