

**Satel**®

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UNIVERSAL  
COMMUNICATION MODULE  
**GSM-X**



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# GSM-X UNIVERSAL

## Communication

- simulation of telephone line via GSM – GSM gateway
- built-in audio communicator
- dual SIM card support
- easy expansion by adding GSM-X-ETH Ethernet module

## Reporting events

- Dual Path Reporting compliant with EN 50136\*
- **reporting sources:**
  - control panel audio reporting
  - internal events of the module
  - input violation
  - output status change
- **reporting paths:**
  - audio (GSM)
  - SMS
  - Ethernet\* (TCP/UDP)
  - GPRS (TCP/UDP)

## Interaction with all control panels

- programmable inputs
- outputs with remote control capability
- converting audio reporting (PSTN) into: audio (GSM), SMS, Ethernet\*, GPRS

## Compatibility with INTEGRA and INTEGRA Plus

- quick data transmission
- reporting events from control panel via RS-232 interface
- automatic composition of SMS notifications from event list (INTEGRA Plus)
- remote management of control panels by using GUARDX program
- remote configuration of control panels by using DLOADX program

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GSM-X



\* When GSM-X is used with GSM-X-ETH

# COMMUNICATION MODULE

## Notification messaging

- notification sources:
  - audio reporting of alarm control panel
  - PAGER format messages
  - internal events of the module
  - input violation
  - output status change
- notification options:
  - voice
  - SMS
  - PUSH
  - CLIP

## GX CONTROL mobile application for Android and iOS

- checking input status with bypassing capability
- controlling and checking output status
- viewing troubles with option to clear trouble memory
- viewing event memory with filtering option
- PUSH notifications

## Remote control of outputs

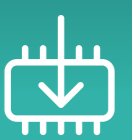
- SMS
- CLIP
- DTMF
- GX CONTROL mobile application
- GX Soft configuration program

## GX Soft configuration program

- intuitive interface
- full module configuration
- viewing event log
- fault diagnostics



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# GSM-X

## UNIVERSAL COMMUNICATION MODULE

GSM-X is a multi-purpose communication module that offers extensive functionality and support for multiple communication paths. It can easily find numerous applications, some of which can be implemented in parallel.



### Full flexibility

The module can be successfully used in many existing and newly built systems. GSM-X can receive information about events from the connected control panel and forward them to the monitoring stations at security agencies or to the parties concerned via the Ethernet\* or GSM network. The module connects to the control panel through the control panel dialer (the module simulates the monitoring station) or through appropriately configured control panel outputs connected to the module inputs.

The module can be used to implement remote control functions, such as arming the system or opening the gate, also using the mobile application.

GSM-X can give a "new life" to some older alarm systems.

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### Compatibility with INTEGRA and INTEGRA Plus alarm control panels

GSM-X can interact with the INTEGRA and INTEGRA Plus control panels via the RS-232 interface. It can report events from these control panels through all available paths: audio, SMS, Ethernet\* and GPRS. For INTEGRA Plus, a function of automatic creation of SMS notifications is also available, the message content being based directly on the event list.

Additionally, **GSM-X** allows remote connection to the **INTEGRA** and **INTEGRA Plus** programs:

- **DLOADX** – which is used for configuration, and
- **GUARDX** – which is used for supervision and administration of alarm systems.

\* When GSM-X is used with GSM-X-ETH

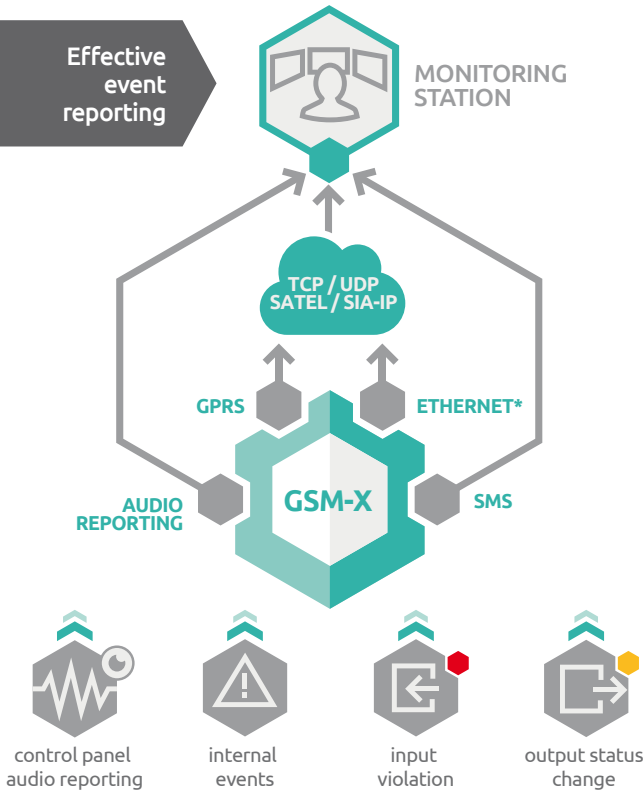
## Communication

The device comes with a GSM telephone. It has two SIM card slots and allows you to use services provided by different operators. If one of the cards causes any communication problems, the module automatically switches to the other card to maintain continuous communication.

A very useful feature is the prepaid SIM card handling functions that allow you to check your account balance and set notifications in case it has dropped below the required minimum.

An undisputable advantage of the device is that it allows simple expansion by adding the **GSM-X-ETH** Ethernet module and thus provides access to another communication channel i.e. **Ethernet network**.

Effective event reporting



## Effective reporting

As regards reporting, information can be effectively transmitted using:

- GPRS – via TCP or UDP protocol
- voice – audio path via GSM
- text – SMS messages
- Ethernet\* – via TCP or UDP.

Where events are made available using GPRS technology or via Ethernet\*, the module supports two transmission formats:

- SIA-IP (for communication with any monitoring station)
- SATEL (for communication with SATEL made devices: STAM-2 monitoring station or SMET-256 reporting converter).

Support for several transmission paths in one device guarantees fast and reliable transfer of information. You can use each of them independently, defining specific tasks to be carried out.

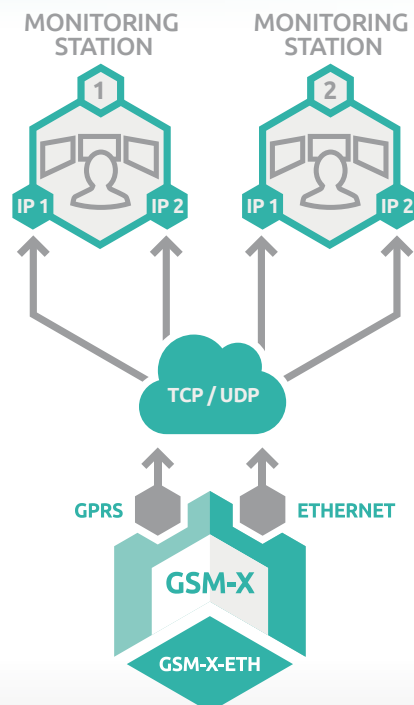
## Dual Path Reporting

GSM-X with the GSM-X-ETH module connected makes possible reporting through two independent paths: Ethernet and GPRS (with priority setting option).

The device is constantly monitoring the status of connections with the monitoring station and, when necessary, it replaces one channel with the other.

The solution used is referred to as Dual Path Reporting.

It complies with the most restrictive requirements of EN 50136 for Category DP4, which refers to the operation, reliability and protection of alarm transmission systems and connections between the alarm system and the receiving center. Additionally, GSM-X offers the possibility of reporting to two autonomous monitoring stations, each of which, if necessary, may have two IP addresses.



Dual Path Reporting implemented via GSM-X + GSM-X-ETH

\* When GSM-X is used with GSM-X-ETH

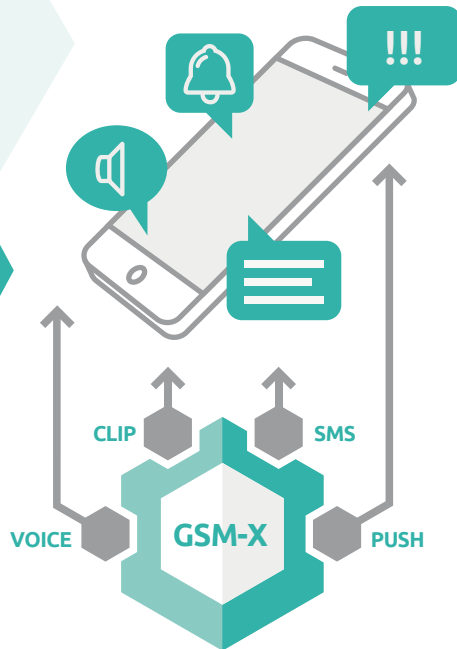
## Notification messaging

The GSM-X module makes it possible to send notifications to up to 8 telephone numbers. This function can be implemented by using:

- voice – via built-in voice notification circuit
- SMS messages
- PUSH notifications
- CLIP service.

The device can transmit notifications to the recipient through several independent paths. The event alert will be sent via all of the preprogrammed channels, therefore the information will reach the recipient even when one of them turns out to be unavailable.

Effective notification



## GSM gateway

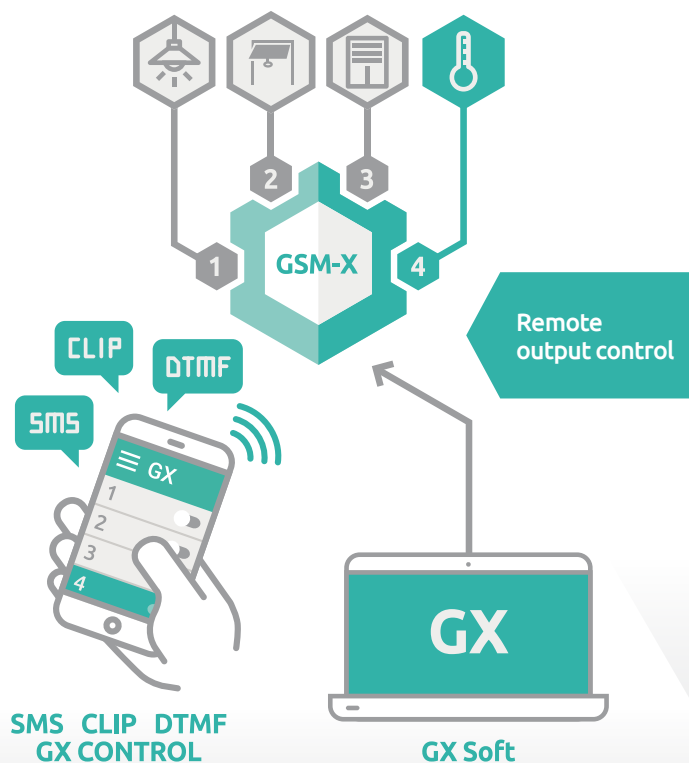
The module can fully replace the analog line. In that case, it generates voltage states and line status signals (e.g. on-hook/off-hook) typical of the line and, after connection via GSM network is set up, it transmits signals coming from the analog line. When the line is unavailable, it diverts the voice calls to the GSM network. In the case of private branch exchanges (PBX), it functions as an additional external line, which allows you to optimize the cost of calls (from PSTN to GSM). The module can also filter calls, generate a ringing tone and caller ID information.

## Remote control

GSM-X has 4 outputs that can be remotely controlled and activated in several ways:

- via SMS messages (from 8 numbers)
  - using DTMF signals
- from GX CONTROL mobile application
- from a computer running the GX Soft program
  - using costless CLIP service

In addition to controlling the alarm system, the GSM-X module will be a perfect choice to implement automation functions, including control of lighting, gates, wickets, roller shutters/blinds, solenoid valves, etc. If needed, it will turn on heating, air conditioning, smoke extraction, watering and many other systems.



## Mobile access

Mobile applications designed for remote operation of various devices are becoming an increasingly popular solution, valued for convenience of use.

**GX CONTROL** is a program created for the needs of SATEL communication modules and intended for Android and iOS platforms. It can be used for:

- verification of the status of inputs and outputs (connected devices)
- viewing troubles with the possibility of clearing their memory
- viewing event memory with the possibility of filtering
- remote control of module outputs (devices connected to them).

**PUSH messages give the user permanent access to information.**

Importantly, configuration of the application is very simple, and so is connection with the module. All you have to do is send an SMS from the application level to the device and receive the configuration data in response. Another, equally convenient way is to scan the QR code that is generated in the **GX Soft** program or in a preconfigured application.



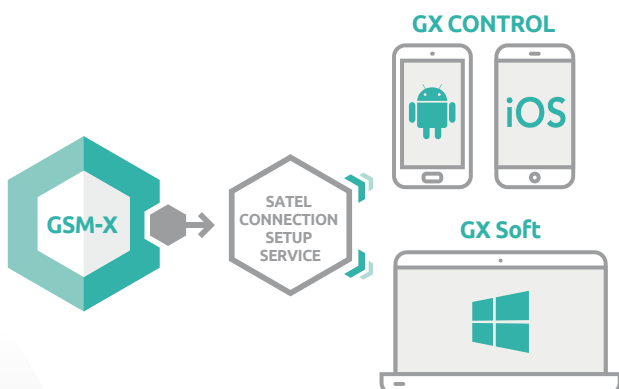
## Functional software

**GX Soft** is an advanced tool provided with a friendly and clear interface, intended for configuration as well as diagnostics of SATEL communication modules. It enables the installer to get access to all functions of the device. Thus, he can program operation of the module to suit it to requirements of the specific system, as well as to expectations of the system users. The module and the program interact locally (via USB) or remotely (via Ethernet\* or GPRS).



## Easy and secure connection

Thanks to the SATEL connection set-up service, you can enjoy many functionalities of GX CONTROL and GX Soft. Configuration of communication between the application / program and the GSM-X module takes just a few moments, without any need to use external IP address or advanced network settings. When being sent, the data are encrypted using a sophisticated algorithm to ensure security of the transmission.



## Remote software update

GSM-X is compatible with the UpServ program, which enables the device to be remotely updated. This allows the installer to quickly add new functionalities without having to physically visit the premises and dismount the module.

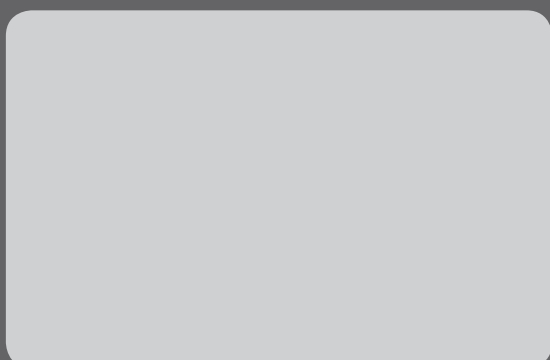
\* When GSM-X is used with GSM-X-ETH



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ul. Budowlanych 66, 80-298 Gdansk, Poland  
tel. +48 58 320 94 00; fax + 48 58 320 94 01  
e-mail: trade@satel.pl

[www.satel.eu](http://www.satel.eu)



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## MORE THAN 25 YEARS OF EXPERIENCE

Professional protection of each type of premises, as well as people staying therein, through advanced, yet functional and cost-effective solutions – these few words may serve as the shortest description of the mission of SATEL, a manufacturer of security systems with involvement of 100% Polish capital. Due to integrity in business and a special emphasis on high quality and a wide range of products offered, the SATEL brand has been highly appreciated in the industry for over 25 years.

This philosophy of management and hard work of more than 300 SATEL's employees produce tangible results. The wide range of over 400 offered products provides countless opportunities to create security, home automation, fire alarm, access control and monitoring systems, tailored to the individual needs of each user. At the same time, these systems meet all requirements prescribed by Polish and international regulations and industry standards.

Bringing the functionality of devices into line with current requirements and expectations of the market with the use of the latest technologies is one of the main objectives of SATEL. For this reason the design and production departments of the Company are continuously being modernized and expanded. A natural consequence of all actions aimed at the production of top-quality devices was the introduction of the quality management system conforming to ISO 9001:2000 in 2002. Regardless of this certification, SATEL also carries out a full functional test of all products leaving the production line, thus ensuring reliability of the manufactured devices. Focusing on modern design and attaching importance to the highest levels of quality and functionality of its products, SATEL has gained many satisfied customers not only in Poland but also in more than 50 markets worldwide.