

# GPRS-A

## UNIVERSAL GPRS MONITORING MODULE

**GPRS-A** is a universal monitoring module that can work as a stand-alone device or as part of intruder alarm systems as well as automation systems. The device is provided with a GSM telephone that supports data transmission in GPRS technology.

In the alarm systems, this module can be used to implement reporting, in conjunction with any alarm control panel. It connects to the control panel with the control panel dialer or appropriately configured outputs.

The device has 8 inputs, which can be set as digital (NO, NC) or analog. Those that work as analogue ones can be used in automation systems or to monitor a wide range of external devices, such as temperature, pressure and humidity sensors. Additionally, **GPRS-A** has a 1-Wire bus, to which up to 8 **DS-T1** digital temperature sensors can be connected. The module can send measurement data using the MQTT, JSON, JSON/HTTP and MODBUS RTU open communication protocols, via GPRS. It is possible to create a server that will collect data from many modules. Gathered informations can be used for processing and visualization – e.g. to supervise environmental parameters prevailing in a group of cold stores, warehouses or production halls. This fits in with the concept of the so-called Internet of Things (IoT). In response to exceeding the preset threshold values of signals on analog inputs or from 1-Wire sensors, **GPRS-A** may respond by reporting such events to the monitoring station or send a notification to the indicated users. It allows to program an automatic reaction consisting in changing the status of selected outputs, e.g. by switching on the heating system due to a significant temperature drop.

The module offers notifications of up to 8 users, in several ways: by using SMS or PUSH messages, or via the CLIP service.

The device has 4 programmable outputs that can be remotely controlled using SMS, CLIP, **GX CONTROL** mobile application or **GX Soft** configuration program, as well as via IoT. **GPRS-A** can thus be used to remotely control the alarm system or other devices connected to the module.

Programming and configuration is performed using computer with the **GX Soft** program. Connection with the module can be local, via RS-232 (TTL) port, or remote, by connecting to the device via GPRS.

Remote update of the device (its firmware) is possible thanks to the interaction with the **UpServ** program.

- conversion of telephone reporting to SMS / GPRS formats
- sending notifications to max. 8 phone numbers
- notification messaging: SMS/CLIP/PUSH
- 8 programmable inputs (NO/NC/analog)
- 1-Wire digital temperature sensor bus (up to 8 sensors)
- possibility to configure response to exceeded threshold values at:
  - analog inputs
  - 1-Wire sensors
- input for supervision of AC voltage presence
- 4 outputs (2 relay, 2 OC type) controlled via SMS / CLIP (up to 10 000 numbers) / **GX CONTROL** / **GX Soft** / via IoT
- IoT – support for MQTT, JSON, JSON/HTTP, MODBUS RTU open protocols via GPRS
- possibility to check pre-paid account balance and send notification if it drops below required minimum
- configuration by using **GX Soft** program:
  - locally via RS-232 (TTL)
  - remotely via GPRS



- support for **GX CONTROL** mobile application
- remote firmware update capability
- possibility of connecting a dedicated power supply unit: **APS-412, APS-612**

## TECHNICAL DATA

Environmental class	II
Number of OC outputs	2
Supply voltage	12 V DC
Number of inputs (zones)	8
Enclosure dimensions	83 x 65 x 23 mm
Operating temperature range	-10...+55 °C
Standby mode current consumption	80 mA
Max. current consumption	220 mA
Weight	110 g
Maximum humidity	93±3%
Number of OC relay outputs	2
Outputs O1...O2 (OC type)	50 mA / 12 V DC
Outputs O3...O4 (relay, NO type)	1000 mA / 30 V DC
Maximum allowable AC input voltage	25 V AC