

# TEKO SECURITY SYSTEMS





# ABOUT US



TEKO was founded in 1992 and since then has been specialized on development and production of security systems equipment. Now the company is one of the leading manufacturers of wireless security and fire alarm systems in Eastern Europe.



Our equipment is used for protection of different facilities in Eastern Europe, CIS, Turkey, Middle East and Latin America. An extensive network of multilevel sales allows you to purchase our products in CIS and abroad. The manufactured equipment meets the requirements of CIS and Europe (CE certification).





TEKO is one of the first security equipment manufacturers in Eastern Europe to implement the ISO 9001 quality management system. The products are manufactured under the "Astra" and "Security Hub" brands.



Our main clients are: police, security and monitoring companies, government structures, banks, large companies, companies from various sectors of the economy and end customers.

# HARDWIRED DETECTORS

## Passive optical-electronic (PIR)



### Astra-5 ver. A

PIR, volumetric zone, 12 m, 90 degrees, microprocessor, tampering control, self-test

### Astra-5 ver. B

PIR, surface (curtain lens), 10 m, 7 degrees, microprocessor, tampering control, self-test



### Astra-512

PIR, volumetric zone, 10 m, 90 degrees, microprocessor, insensitive to pets (up to 20 kg), tampering control, indication control, installation using the bracket supplied, additional ball bracket supported



### Astra-515 ver. A

PIR, volumetric zone, 10 m, 90 degrees, discrete sensitivity adjustment, angle bracket included



### Astra-7 ver. A

PIR, volumetric zone, ceiling mount, detection zone diameter 9 m, installation height up to 3.6 m, microprocessor, discrete sensitivity adjustment



### Astra-517

PIR, volumetric zone, 12 m, 90 degrees, microprocessor, temperature compensation, tampering control, self-test, installation using a ball bracket supported (not included)





#### Astra-517 ver. P

PIR, volumetric zone, 10 m, 90 degrees, microprocessor, insensitive to pets (up to 20 kg), tampering control, self-test



#### Astra-531 ver. IR

PIR, surface (curtain lens), miniature, 5 m, 30 degrees, microprocessor, ball bracket included

## Glass break (acoustic)



#### Astra-GB

Glass break, detection range 6 m, microprocessor, discrete sensitivity adjustment, tampering control, alarm memory function

## Dual channel (PIR + acoustic)



#### Astra-8

PIR + acoustic, ceiling mount, PIR: zone diameter 9 m, acoustic: 6 m, installation height up to 3.6 m, microprocessor, 2 relays, discrete sensitivity adjustment of GB and PIR channels



#### Astra-531 ver. DC

PIR + acoustic, wall mount, ceiling mount, window openings protection, microprocessor, PIR: "curtain lens" 5 m, acoustic: 6 m, 1 relay - combination by "OR" logical diagram, discrete sensitivity adjustment of GB and PIR channels, ball bracket included



#### Astra-621

PIR + acoustic, wall mount, microprocessor, PIR: 12 m, 90 degrees, acoustic: 6 m, 2 relays, tampering control



#### Astra-621 ver. P

PIR + acoustic, wall mount, microprocessor, PIR: 12 m, 90 degrees, acoustic: 6 m, 2 relays, insensitive to pets (up to 20 kg), tampering control

## Panic button and emergency detectors



#### Astra-321

Panic button, latched when pressed, individual mechanical unlock key



#### Astra-361

Emergency type water leak detector, 2.5 - 30 V loop power, 3 m cable length

## CONTROL PANELS



#### Security Hub controller

Controller for GSM security system, connection to the cloud server via the LAN and GSM, 2 SIM cards supported, control of up to 32 wireless devices of various types via the built-in radio module 433 MHz, 4 hardwired alarm loops, 6 relay outputs, Touch Memory input. Configuration, monitoring and control via a mobile application (Android, iOS), a web application or CrossArm professional software, powered from a 110-250 V AC (50/60 Hz) network via a power adapter or from a 12 V DC power supply (two power inputs - main and backup), backup battery included

Built-in radio module  
433 MHz



#### Security Hub (4G) controller

CE certified

Controller NB-IoT SIM supported, control of up to 32 wireless devices of various types via the built-in 433 MHz radio module, 4 hardwired alarm loops, 6 relay outputs, Touch Memory input. Configuration, monitoring and control via a mobile application (Android, iOS), a web application or CrossArm professional software, powered from a 110-250 V AC (50/60 Hz) network via a power adapter or from a 12 V DC power supply (two power inputs - main and backup), backup battery included

Built-in radio module  
433 MHz





### Astra-712/1 (712/2)

Conventional control panel, control of 1 (2) alarm loops, built-in power supply (space for backup battery 7 Ah), Touch Memory input, button (included), an output for powering detectors 12V / 550 mA, 2 relay outputs, configuration using jumpers



### Astra-713

Conventional alarm loop extender, control of 8 hardwired alarm loops, operation as part of a system with a control panel Astra-8945 Pro, Astra-812 Pro, digital exchange via RS-485 interface. Standalone mode of operation. Arming and disarming with Touch Memory keys, button or built-in alarm loop indicator buttons (in standalone mode). 2 relay outputs, 2 open collector outputs, operating mode selection using PC. Connecting to a PC with an Astra-984 interface unit (not included in the delivery set)



Built-in radio module  
433 MHz

### Astra-812 Pro

Pro series control panel, control of up to 999 addressable devices, of which up to 192 wireless devices via the built-in radio module and Astra-WE 433 radio extenders, control of up to 999 hardwired addressable devices via Astra-A RPA addressable extenders, up to 240 conventional alarm loops via Astra-713 hardwired loop extender, information exchange via RS-485 interface, slot for plug-in modules: Astra-GSM (PAK Astra), Astra-LAN (PAK Astra), Astra-RS-485. Arming and disarming using PIN codes, Touch Memory keys, key fobs. 3 relays, 3 "open collector". Configuring and monitoring using the keypad or PC with PKM Astra Pro software installed



### Astra-8945 Pro

Pro series control panel, control of up to 2000 addressable devices, of which up to 192 wireless devices through Astra-WE 433 radio extender, up to 2000 hardwired addressable detectors using Astra-A RPA addressable extender, up to 240 conventional alarm loops through hardwired alarm loop extenders Astra-713, information exchange via RS-485 interface, 2 slots for plug-in modules: Astra-GSM (PAK Astra), Astra-LAN (PAK Astra), Astra-RS-485. Arming and disarming using Touch Memory keys, PIN-codes via Astra-814 Pro keypad, key fobs. 4 relays, 3 open collector outputs. Configuring and monitoring using a PC with PKM Astra Pro software installed. Astra-942 laser tool included.

## KEYPADS



### Astra-814 Pro

Keypad for a system with a control panel Astra-8945 Pro, Astra-812 Pro, connection via RS-485. Provides entry of PIN codes, display of notifications received from the control panel on the LCD and built-in buzzer, 1 relay, Touch memory input, powered by 12 V DC or 24 V DC, wall-tampering control, not intended for configuration of the system



### Astra-8121

Wireless keypad for operating with the Security Hub controller, 433 MHz, provides PIN code entry, powered by 2 AA 1.5 V DC batteries or an external 12 V DC power supply, wireless coverage range up to 100 m



### Astra-8131

Wireless keypad for operating with the Pro series control panel or Security Hub controller, two-way radio exchange, 433 MHz, provides PIN-code entry, display of notifications from the control panel or controller on the LCD and built-in buzzer, powered by a LS 14500 3.6 V DC battery or from an external 12 V DC power supply, wireless coverage range up to 300 m

## ADDITIONAL UNITS

### Communicators



### Astra-GSM (PAK Astra)

Module for installing to the Pro series control panel (Astra-812 Pro, Astra-8945 Pro). Information exchange with the PAK Astra server, SMS messages to mobile phones. Monitoring and remote control of control panel via the Internet (mobile and web applications, CrossArm). GSM antenna BY-3G-05 included, cable length 2.5 m.



### Astra-LAN (PAK Astra)

Module for installing to the Pro series Control Panel (Astra-812 Pro, Astra-8945 Pro). Information exchange with the PAK Astra server via the Internet using Ethernet 10/100 Base-T network interface for remote monitoring and control of the control panel (mobile and web applications, CrossArm). Terminal board for connecting the LAN line to the Astra-812 Pro control panel included.





### Astra-RS-485

Module for installing to the Pro series control panel (Astra-812 Pro, Astra-8945 Pro). Provides the Control Panel with an additional interface of the EIA RS-485 standard, independent of the built-in RS-485, for connecting additional units or for configuring and monitoring the system using PC with PKM Astra Pro software installed through the Astra-984 interface unit. Terminal board for connecting the RS-485 line to the Astra-812 Pro control panel included.

## Relay units



### Astra-823

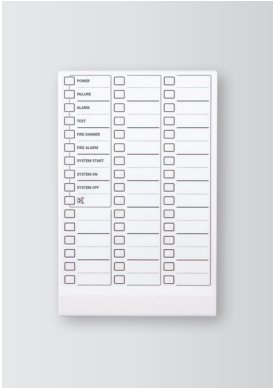
Relay unit, 4 outputs, 2 of them with circuit integrity control, 2 uncontrolled outputs - power relays with changeover contacts, 250 V AC, 3A. Operation with Astra-812 Pro, Astra-8945 Pro control panel as a master device or Astra-WE 433 standalone radio extender, connection via RS-485, selection of relay operating modes using a PC with PKM Astra Pro software installed.



### Astra-824

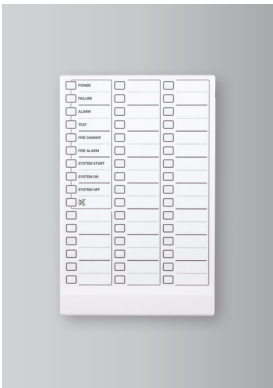
Signal relay unit, 8 optorelays, load capacity 100V/100mA. Operation with Astra-812 Pro, Astra-8945 Pro control panel as a master device or Astra-WE 433 standalone radio extender, connection via RS-485, selection of relay operation modes using a PC with PKM Astra Pro software installed, two power inputs (main and backup), power supply from 12 V DC or 24 V DC

## Indication units



### Astra-863 ver. A

Indication unit, 8 LEDs of generic status of the system, 38 LEDs of the status of partitions/ directions, built-in buzzer, Touch Memory input. Operation with Astra-812 Pro, Astra-8945 Pro control panel as a master device or Astra-WE 433 standalone radio extender, connection via RS-485, two power inputs (main and backup), power supply from 12 V DC or 24 V DC



### Astra-863 ver. B

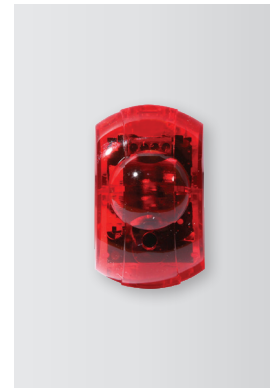
Indication and control unit, 8 LEDs of generic status of the system, 19 LEDs of the status of partitions/ directions with control buttons, buzzer, Touch Memory input. Operation with Astra-812 Pro, Astra-8945 Pro control panel as a master device, connection via RS-485, two power inputs (main and backup), power supply from 12 V DC or 24 V DC

## Sirens



### Astra-10 ver. 3

Light and sound siren, super-bright LEDs, power supply 9–27 V DC, 105 dBA, two independent channels: light and sound, IP54



### Astra-10 ver. M2

Light and sound siren, super-bright LEDs, miniature case, power supply 10–15 V DC, 40 mA, 85 dB



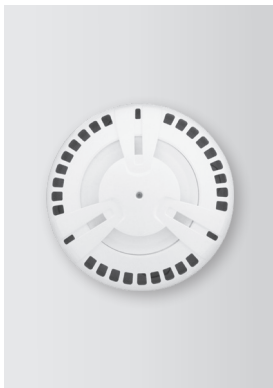
# HARDWIRED ADDRESSABLE DEVICES

## Astra-A



### Astra-A RPA

Addressable hardwired extender for controlling of two independent addressable signaling line circuits (SLC), connection of up to 250 addressable devices in each SLC (no more than 250 in total), output power supply unit for two SLC. Operation as a part of a system with central control panel Astra-812 Pro, Astra-8945 Pro, connection to the control panel up to 16 extenders via RS-485, two power inputs (main and backup), power supply from 12 V DC or 24 V DC



### Astra-42A

Addressable smoke detector, operation with control panel Astra-812 Pro, Astra-8945 Pro via the Astra-A RPA hardwired addressable extender, 4-wire, powered by the RPA, testing, registration using the Astra-942 laser tool, measurement and transmission dustiness (smoke) and air temperature, protective cover included



### Astra-42A ver. IKZ

Addressable smoke detector, operation with control panel Astra-812 Pro, Astra-8945 Pro via the Astra-A RPA hardwired addressable extender, 4-wire, powered by the RPA, testing, registration using the Astra-942 laser tool, measurement and transmission of dustiness (smoke) and air temperature, built-in short circuit isolator, protective cover included



### Astra-43A

Addressable heat detector fixed temperature and rate-of-rise, operation with control panel Astra-812 Pro, Astra-8945 Pro via the Astra-A RPA hardwired addressable extender, 4-wire, powered by RPA, testing, registration using the Astra-942 laser tool, measurement and transmission air temperature



### Astra-45A

Addressable manual call point, operation with control panel Astra-812 Pro, Astra-8945 Pro via the Astra-A RPA hardwired addressable extender, 4-wire, powered by RPA, testing, registration using Astra-942 laser tool, built-in short circuit isolator



### Astra-MA

Addressable mark for connecting conventional devices with relay outputs of the "dry contact" type, 2 conventional alarm loops, does not provide connection of detectors powered by loops, monitoring the state of fire-type loops for open and short circuits, operation with Astra-812 Pro, Astra-8945 Pro control panels via the Astra-A RPA hardwired addressable extender, powered by the RPA, registration using the Astra-942 laser tool



### Astra-BRA

Addressable relay unit for control and monitoring of smoke ventilation dampers, fire dampers of general ventilation, deluge dampers, operation with Astra-812 Pro, Astra-8945 Pro control panels via the Astra-A RPA hardwired addressable extender; power supply of the signal part - from RPA, power part - from 220 V AC; testing, registration using the Astra-942 laser tool



### Astra-A ILS

Short circuit isolator for addressable line SLC or the RS-485 interface (with an expansion unit) when a short circuit is detected in order to protect the system's operability, when operating SLC, powered by RPA through the power supply circuit of SLC, during operation in the RS-485 line powered by the power supply circuit of the nearest expansion unit



### Astra-BPA

Addressable signal-start unit for control of evacuation system devices in case of fire, for control and start of automation control cabinets (pumps, dampers, ventilation), 4 alarm loops, 2 outputs with/without control of the open and short circuits, operation with control panel Astra-812 Pro, Astra-8945 Pro via hardwired addressable extender Astra-A RPA; power supply of the signal part - from the RPA, the executive part - from a power supply of 12 V DC or 24 V DC; two power inputs from 12/24 V DC, testing, registration using the Astra-942 laser tool, DIN rail installation supported



# WIRELESS DEVICES

## Astra-R system



### Astra-R kit

Kit includes: wireless receiver (RVA) + 2 key fobs (TRC), frequency 434,62 MHz, 300 m, 1 signaling relay 100 V/0.1 A, supports up to 99 key fobs, built-in antenna



### Astra-TRC

Key fob, frequency 434.62 MHz, wireless coverage up to 300 m, battery level control



### Astra-RVC

Wireless receiver, frequency 434.62 MHz, 1 power relay 250 V/1 A, supports up to 99 key fobs, built-in antenna

## 433 MHz security system



Built-in radio  
module  
433 MHz

### Astra-812 Pro

Pro series control panel, control of up to 999 addressable devices, of which up to 192 wireless devices via the built-in radio module and Astra-WE 433 radio extenders, control of up to 999 hardwired addressable devices via Astra-A RPA addressable extenders, up to 240 conventional alarm loops via Astra-713 hardwired loop extender, information exchange via RS-485 interface, slot for plug-in modules: Astra-GSM (PAK Astra), Astra-LAN (PAK Astra), Astra-RS-485. Arming and disarming using PIN codes, Touch Memory keys, key fobs. 3 relays, 3 "open collector". Configuring and monitoring using the keypad or PC with PKM Astra Pro software installed



Built-in radio  
module  
433 MHz

### Astra-WE 433

Wireless extender, built-in 433 MHz radio module, frequency range 433 MHz, 2 modes of operation: standalone or repeater. Control of up to 48 wireless devices of various types, 4 programmable outputs: 3 relays and an "open collector", RS-485 interface for connecting Astra-863 ver. A indication units, relay units Astra-823/824, two power inputs (main and backup), power supply from 12 V DC or 24 V DC. Whip antenna included



### Astra-2331

CE certified

Wireless light and sound siren, two-way radio exchange, sound pressure 85 dB, powered by a CR123A battery or from an external source of 12 V DC, wireless coverage range up to 300 m, IP41



### Astra-3221

CE certified

Wireless panic button, silent button, stationary mounting supported, wearing with a clip or chain, registration using the Astra-942 laser tool, wireless coverage range up to 1000 m, CR2430 battery included



### Astra-3321

CE certified

Wireless door opening magnetic contact detector, tampering control, connection of external magnetic contact detectors supported, registration using Astra-942 laser tool, wireless coverage range up to 300 m, CR123A battery included



#### Astra-361 ver. RF

CE certified

Wireless water leak detector, wireless coverage range up to 300 m, CR123A battery included



#### Astra-431 ver. RF

CE certified

Wireless heat detector, fixed temperature and rate-of-rise, two-way radio channel, wireless coverage range up to 300 m, registration and testing using the Astra-942 laser tool, measurement and transmission air temperature, two CR123A batteries included



#### Astra-3731

CE certified

Wireless temperature detector, connection of an external temperature sensor DS18B20 supported (not included in the delivery set), the range of measured temperatures: built-in sensor - from -30 to 55°C, external sensor - from -55 to 125 °C; wireless coverage range up to 300 m, LS14500 battery included



#### Astra-4511

CE certified

Fire manual call point, two-way radio channel, wireless coverage range up to 300 m, two CR123A batteries included, registration and testing using the Astra-942 laser tool



#### Astra-421 ver. RF

CE certified

Wireless smoke detector, two-way radio channel, wireless coverage range 300 m, registration and testing using the Astra-942 laser tool, measurement and transmission of dustiness (smoke) and air temperature, protective cover and two CR123A batteries included



#### Astra-5121

CE certified

Wireless PIR detector, volumetric, 10 m, 90 degrees, insensitive to pets (up to 20 kg), microprocessor, temperature compensation, tampering control, measurement and transmission of air temperature, wireless coverage range up to 300 m, CR123A battery included





#### Astra-5131 ver. A

CE certified

Wireless PIR detector, volumetric, 10 m, 90 degrees, microprocessor, temperature compensation, tampering control, air temperature measurement and transmission, wireless coverage range up to 300 m, CR123A battery included



#### Astra-6131

CE certified

Wireless glass break detector, range 6 m, microprocessor, discrete sensitivity adjustment, tampering control, registration using Astra-942 laser tool, wireless coverage range up to 300 m, CR123A battery included



#### Astra-5131 ver. B

CE certified

Wireless PIR detector, surface, 10 m, 7.5 degrees, microprocessor, temperature compensation, tampering control, air temperature measurement and transmission, wireless coverage range up to 300 m, CR123A battery included



#### Astra-8 ver. RF

CE certified

Wireless PIR + acoustic glass break detector, ceiling mount, PIR zone diameter 9 m, acoustic: 6 m, installation height up to 3.6 m, microprocessor, discrete adjustment of sensitivity of acoustic and PIR channels, tampering control, measurement and transmission of air temperature, registration using the Astra-942 laser tool, wireless coverage range up to 300 m, LS14500 battery included



#### Astra-5131 ver. C

CE certified

Wireless PIR, surface, curtain lens, 5 m, 12 degrees, microprocessor, temperature compensation, discrete sensitivity adjustment, tampering control, air temperature transmission, registration using Astra-942 laser tool, wireless coverage range up to 300 m, ball bracket included, CR123A battery included



#### Astra-621 ver. RF

Wireless PIR + acoustic glass break detector, wall-mounted, PIR: 12 m, 90 degrees, acoustic: 6 m, microprocessor, tampering control, registration using Astra-942 laser tool, wireless coverage range up to 300 m, CR123A battery included



### Astra-RC

CE certified

Key fob, 3-button (alarm, arming, disarming), wireless coverage range up to 1000 m, CR2430 battery included



### Astra-8731

CE certified

Smart socket, plugged into 110 - 220 V AC socket, control of the connected device, two-way radio exchange, wireless coverage range up to 300 m, registration and testing using laser tool Astra-942



### Astra-8131

CE certified

Wireless keypad, two-way radio exchange, provides PIN-code entry into the control panel or controller for control, display of notifications from the control panel or controller on the LCD and a built-in buzzer, powered by a battery LS14500 or from an external source of 12 V DC, wireless coverage range up to 300 m



### Astra-8231

CE certified

Wireless relay unit, two-way radio exchange, three-pin power relay 250 V, 5 A, powered by a battery CR123A or from an external source of 12 V DC, wireless coverage range up to 300 m

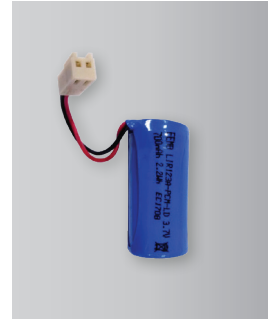
# BATTERIES



## Battery

CR123A

For most of wireless devices (except Astra-3731, Astra-RC, Astra-3221, Astra-8 ver. RF, Astra-8131, Astra-8121)



## Rechargeable battery

LIR123A-PCB(PCM)-LD(/A12787) EEMB

For Security Hub, Security Hub 4G controllers for backup, 600 or 700 mAh



## Battery

CR2430

For devices: Astra-RC, Astra-TRC, Astra-3221, Astra-942 laser tool



## Battery

LS14500

For devices: Astra-3731, Astra-8 ver. RF, Astra-8131

# SERVICE EQUIPMENT



**Astra-712/0 ver. 1A**

**Astra-712/0 ver. 2A**

Power supply, input. voltage 184~264.5 V AC; output voltage when powered from the network - 13.2 ~ 13.8 V DC; output voltage when powered from the battery - 10.2 ~ 13.2 V DC; Max. load current 1.15 A for ver. 1A; 2.2 A for ver. 2A; Battery 7.2 Ah, battery charge current limit 200 mA for ver. 1A, 500 mA for ver. 2A. Protection against: deep discharge, battery reverse polarity, short circuit in the battery circuit, short circuit at the input, overload



**Astra-984**

Interface unit RS-485/USB for configuring and control of Astra devices with RS-485 interface



**Astra-942**

Laser tool for registering and testing of Astra-A addressable wired devices and wireless devices, included in the Astra-8945 Pro delivery set



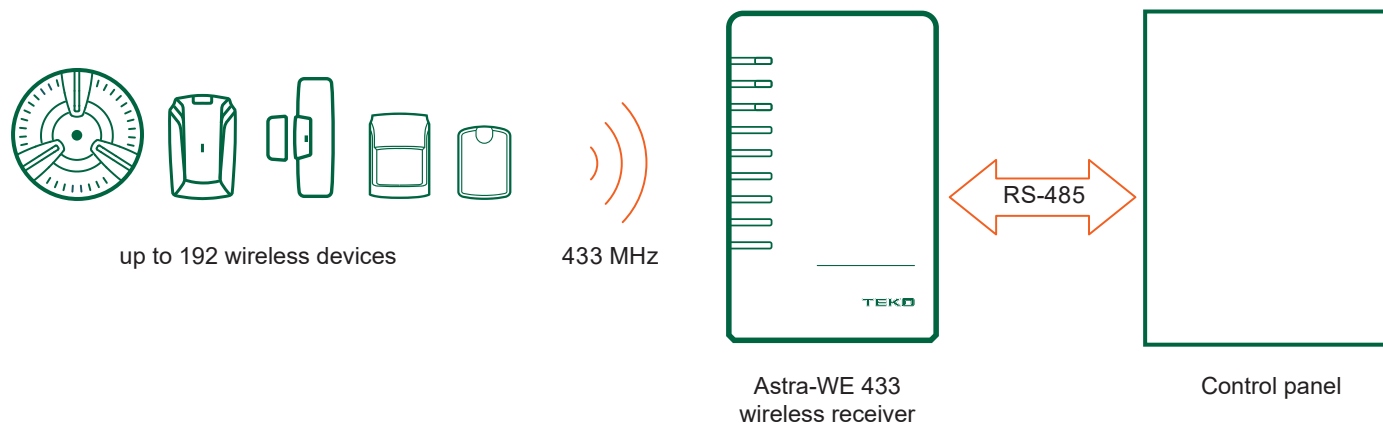
**Bracket**

Ball and Swivel

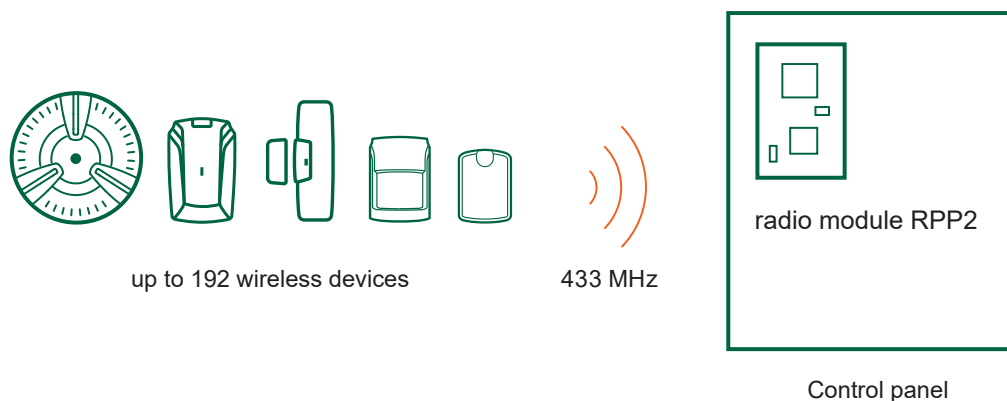


# INTEGRATION

Option 1: via external radio receiver «Astra-WE 433»  
using the RS-485 interface and the «Astra-L» data exchange protocol



Option 2: via the integrated radio module «RPP2»,  
using the UART interface and the «Astra-M» data exchange protocol



# CLOUD SERVER ASTRA

## Controllers



CE  
**Security Hub**  
for small installations



Communication modules  
Astra-GSM (PAK Astra)  
Astra-LAN (PAK Astra)

**Astra Pro control panel**  
for large installations

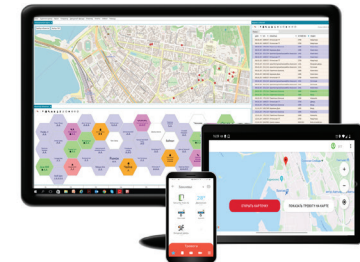


GSM/GPRS

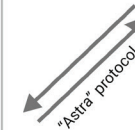


Ethernet

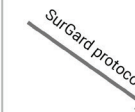
## Monitoring software



Monitoring software Astra  
Mobile application



Cloud server  
Astra



# WIRELESS ALARM SYSTEM FOR 1-BEDROOM APARTMENT. PROTECTION FROM INTRUSION, FIRE AND ACCIDENTS

Typical solution for 1-bedroom apartment protection using wireless detectors, Security Hub Controller and a smartphone.

Arming and disarming the system is performing using a smartphone with installed Security Hub mobile app, it is possible to control the system using key fobs.



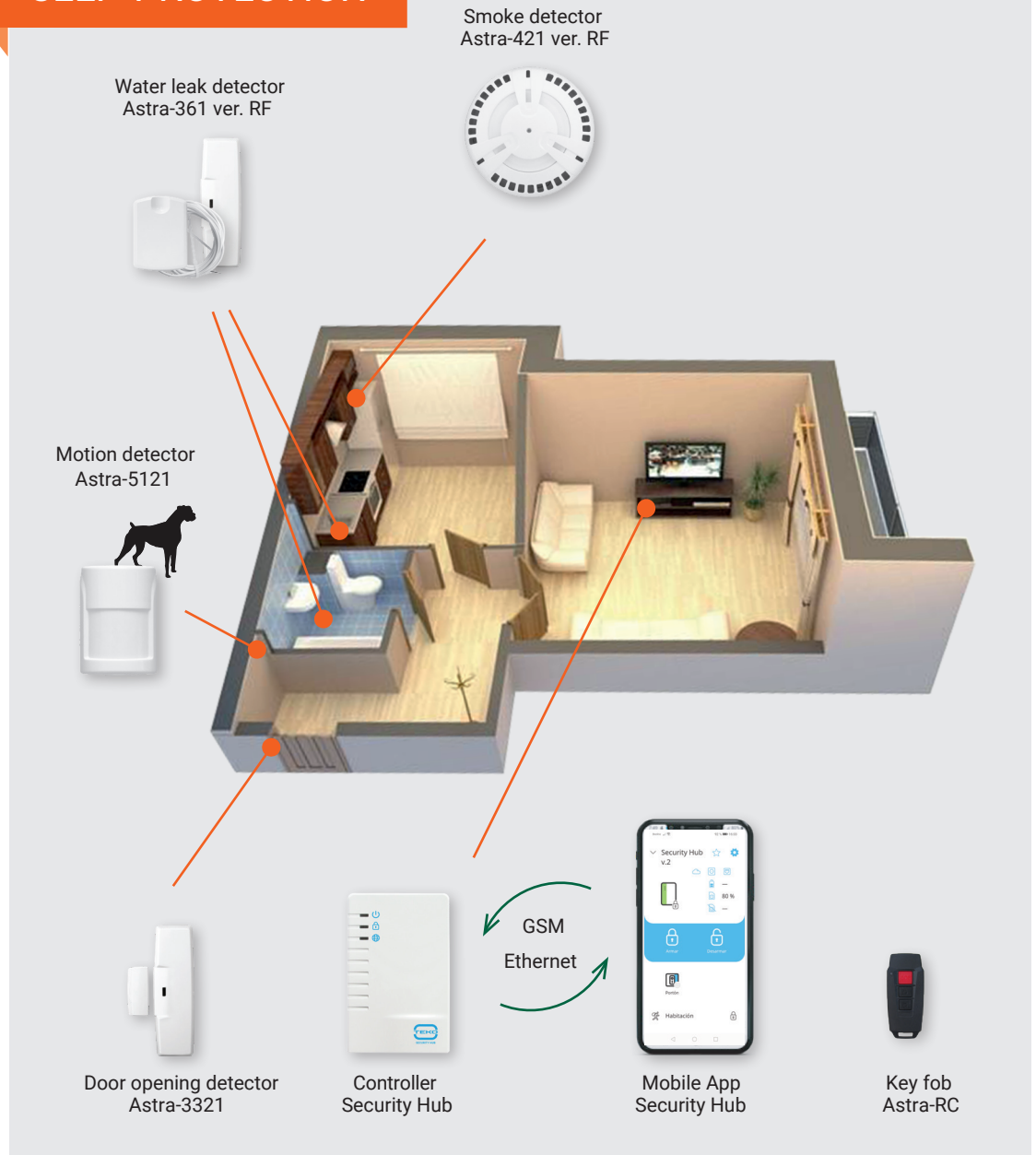
Disponible en  
Google play



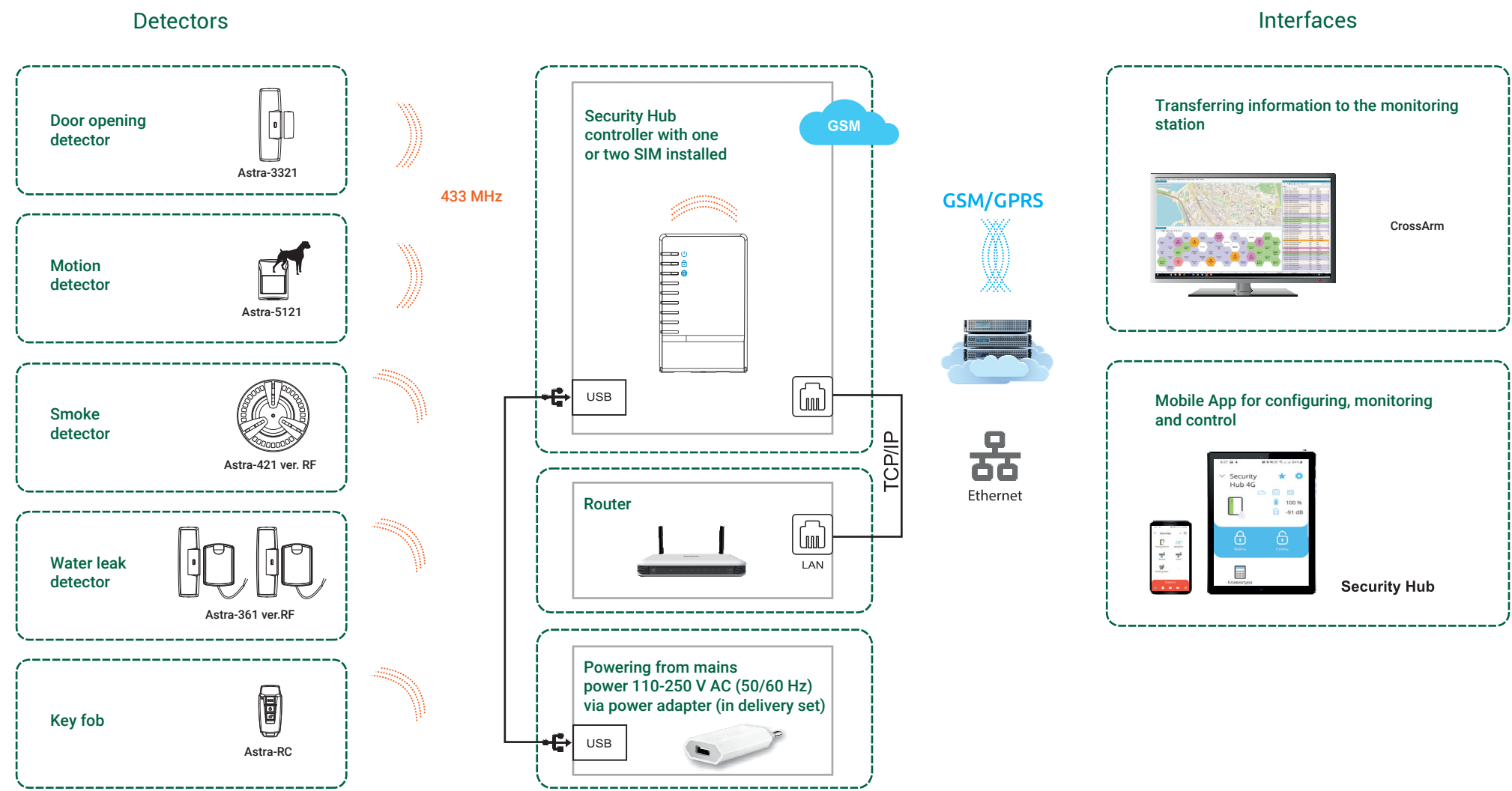
Disponible en  
App Store

Alarm notification events are carried out on the user's smartphone.

## SELF-PROTECTION



# Wiring diagram





## Devices list

Name	Description	Quantity
Security-Hub kit	<b>Kit includes:</b> 1.Controller Security Hub 2.Motion detector Astra-5121 3.Door opening detector Astra-3321	1
Astra-361 ver. RF	Wireless water leak detector	2
Astra-421 ver. RF	Wireless smoke detector	1
Astra-RC	Key fob (arm, disarm, panic button)	1

## Features

- DIY installing and configuring. 3-steps setup
- Configuration and control via smartphone
- No wires needed
- A large list of additional radio devices
- Free software for monitoring with up to 1 million controllers

# CONVENTIONAL INTRUSION AND FIRE ALARM SYSTEM FOR A COTTAGE

Typical solution for protection a small cottage using Security Hub Controller and hardwired detectors:

- to protect the front door hardwired magnetic contact detector IO 102-14 is used
- to protect the internal volume motion detector Astra-517 is used
- to protect the garage door hardwired magnetic contact detector IO 102-20 is used

Arming is carried out using Touch Memory keys and/or Security Hub mobile app.

Alarm signal is carried out via GSM or Ethernet as push-notification to the user's smartphone. It is possible to transmit an alarm signal to the monitoring station.

Light and sound siren Astra-10 ver. 3 is used to show the status of the system and to scare away the intruders.

Power supply Astra-712/0 ver. 1A is used for powering the system devices.

## INEXPENSIVE

Siren  
Astra-10 ver. 3



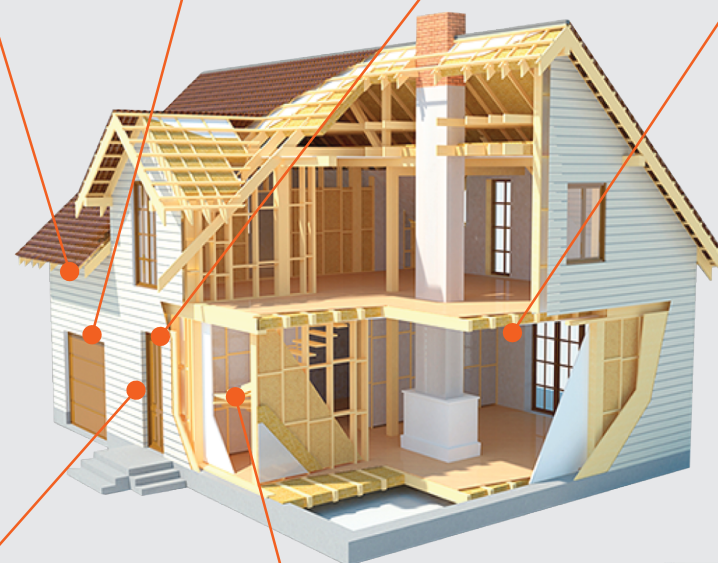
Door opening detector  
IO 102-20



Door opening detector  
IO 102-14



Motion detector  
Astra-517



Reader and TM  
keys for arming/  
disarming

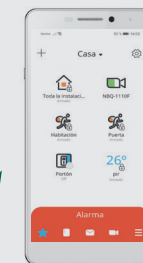


Power supply  
Astra-712/0 with  
7 Ah battery inside



Controller  
Security Hub

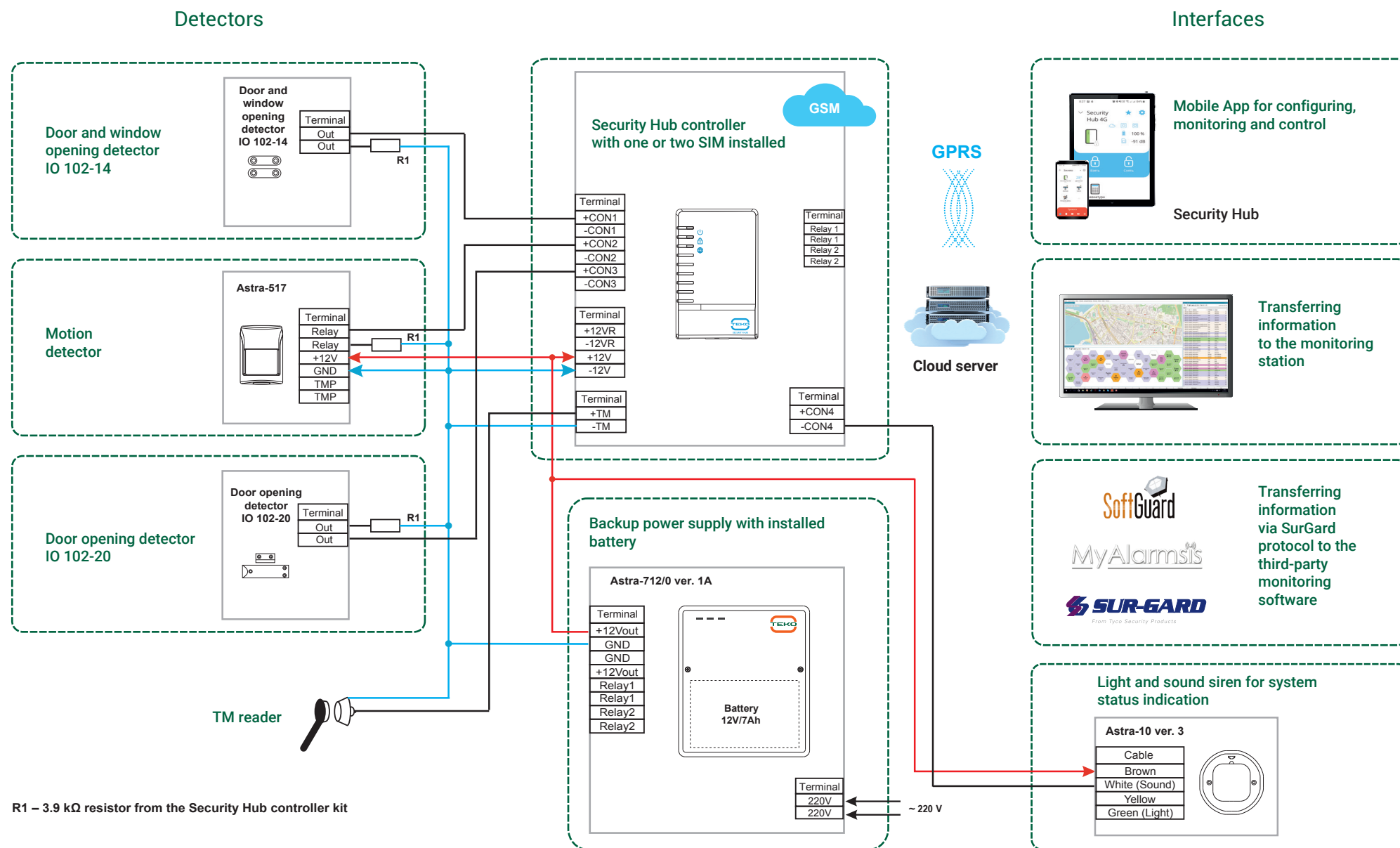
GSM



Mobile App  
Security Hub



## Wiring diagram



## Devices list

Name	Description	Quantity
Controller Security Hub	Controller	1
Astra-517	Motion detector, volumetric	1
Door opening detector 102-14	Door opening magnetic contact detector	1
Door opening detector 102-20	Door opening magnetic contact detector	1
Astra.10 ver. 3	Light and sound siren	1
Astra-712/0 ver. 1A	Backup power supply 12V DC, 1A	1
Battery	12V, 7A/h	1
TM reader	TM reader	1
Low current cable with 4 core	4 core single strand low current cable, outer diameter = 3.2mm, core diameter = 0.4	1 m
Mains cable	Mains cable for voltage up to 380 V AC	1 m

## Features

- Inexpensive solution for protection of a small cottage.
- Configure the system using Security Hub mobile app
- Control the presence of 220 V AC mains power of the system. The notification about the mains power failure is sent to the smartphone of the user



# WIRELESS SECURITY AND FIRE ALARM SYSTEM FOR A PRIVATE HOUSE

Typical solution for a private house security system using Security Hub Controller and wireless devices.

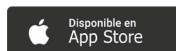
These wireless detectors are used:

- to protect the internal volume and windows breaking – combined ceiling mount detector Astra-8 ver. RF
- to protect the garage door from opening – motion detector Astra-5131 ver. C (curtain type)
- to protect the front door – door opening magnetic contact detector Astra-3321
- to detect smoke – smoke detector Astra-421 ver. RF
- to protect against water leaks - Astra-361 ver. RF
- for climate control indoors or on heating appliances – temperature detector Astra-3731

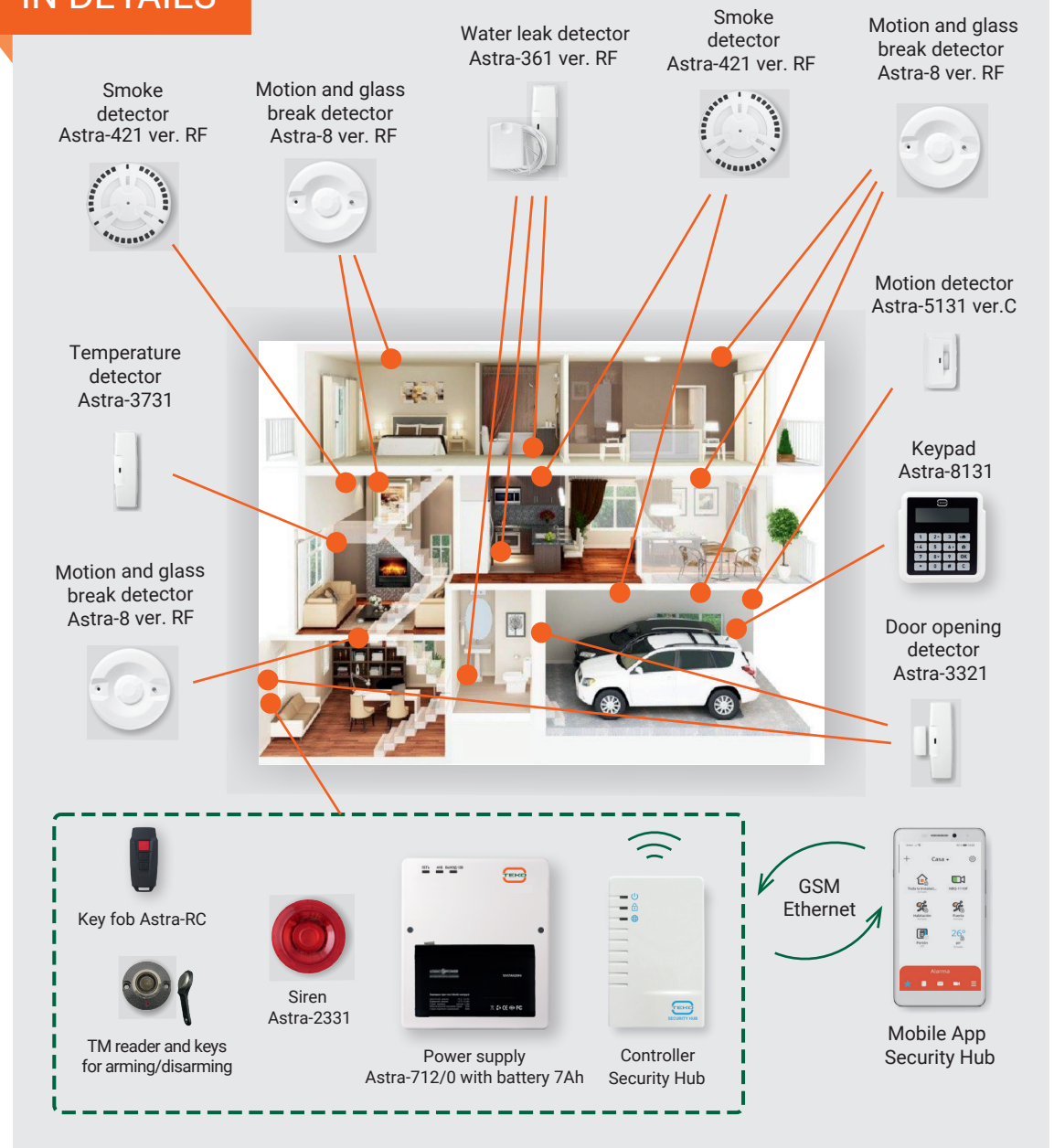
Control of alarm system is carried out by key fobs Astra-RC, wireless keypad, Touch Memory keys and/or using the user's smartphone via mobile app Security Hub.

Alarm notifications in the system is carried out by GSM or Ethernet channel as push notifications on the user's smartphone.

Wireless light and sound siren Astra-2331 show the status of the system and scare away the intruders.

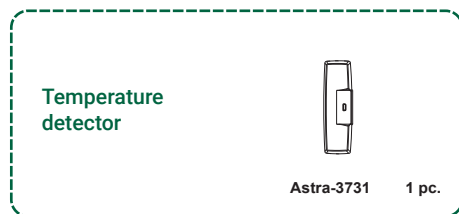
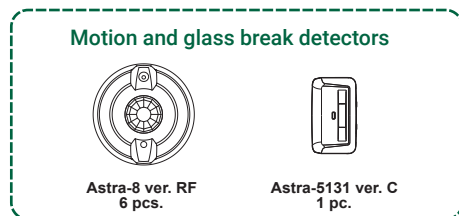
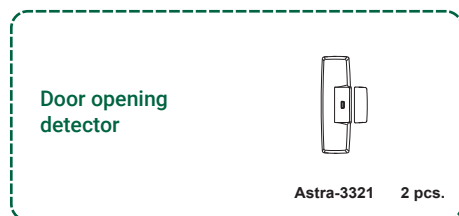


## IN DETAILS

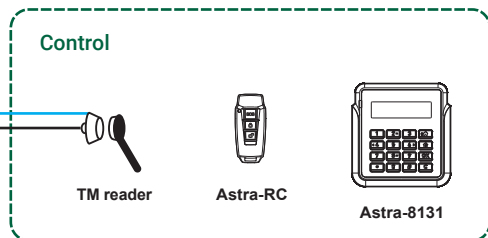
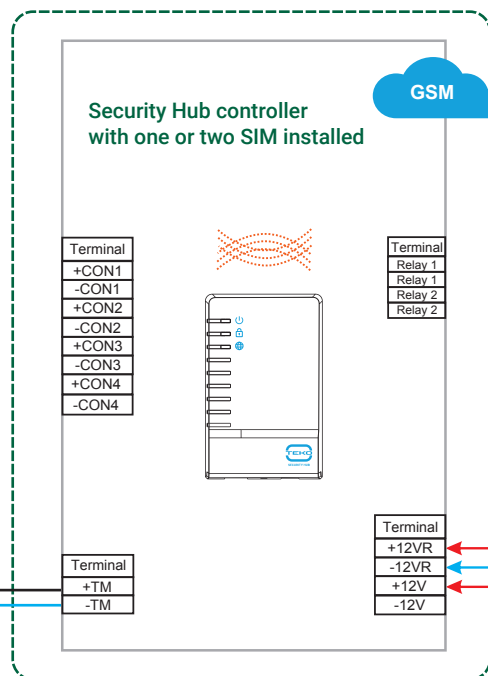


# Wiring diagram

## Detectors

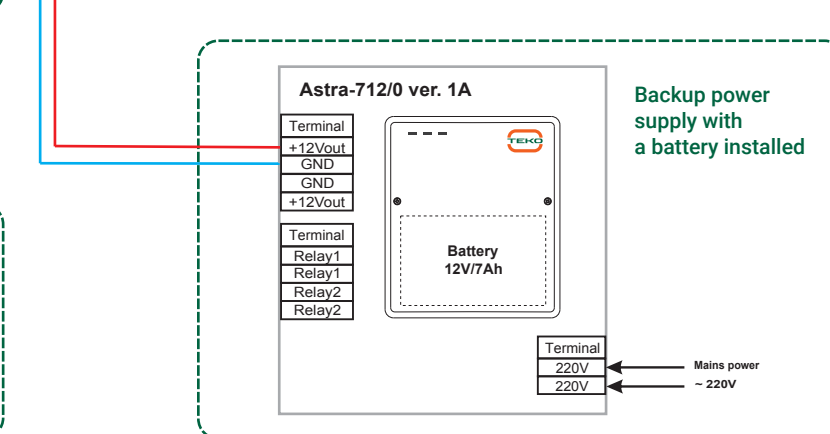
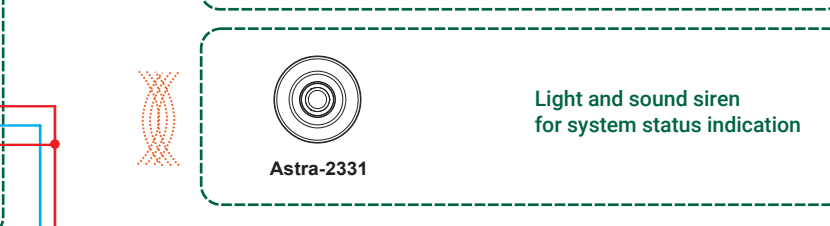


433 MHz



## Interfaces

GSM/GPRS



# CLIMATE CONTROL AND BOILER CONTROL

Climate control and boiler control for country house.

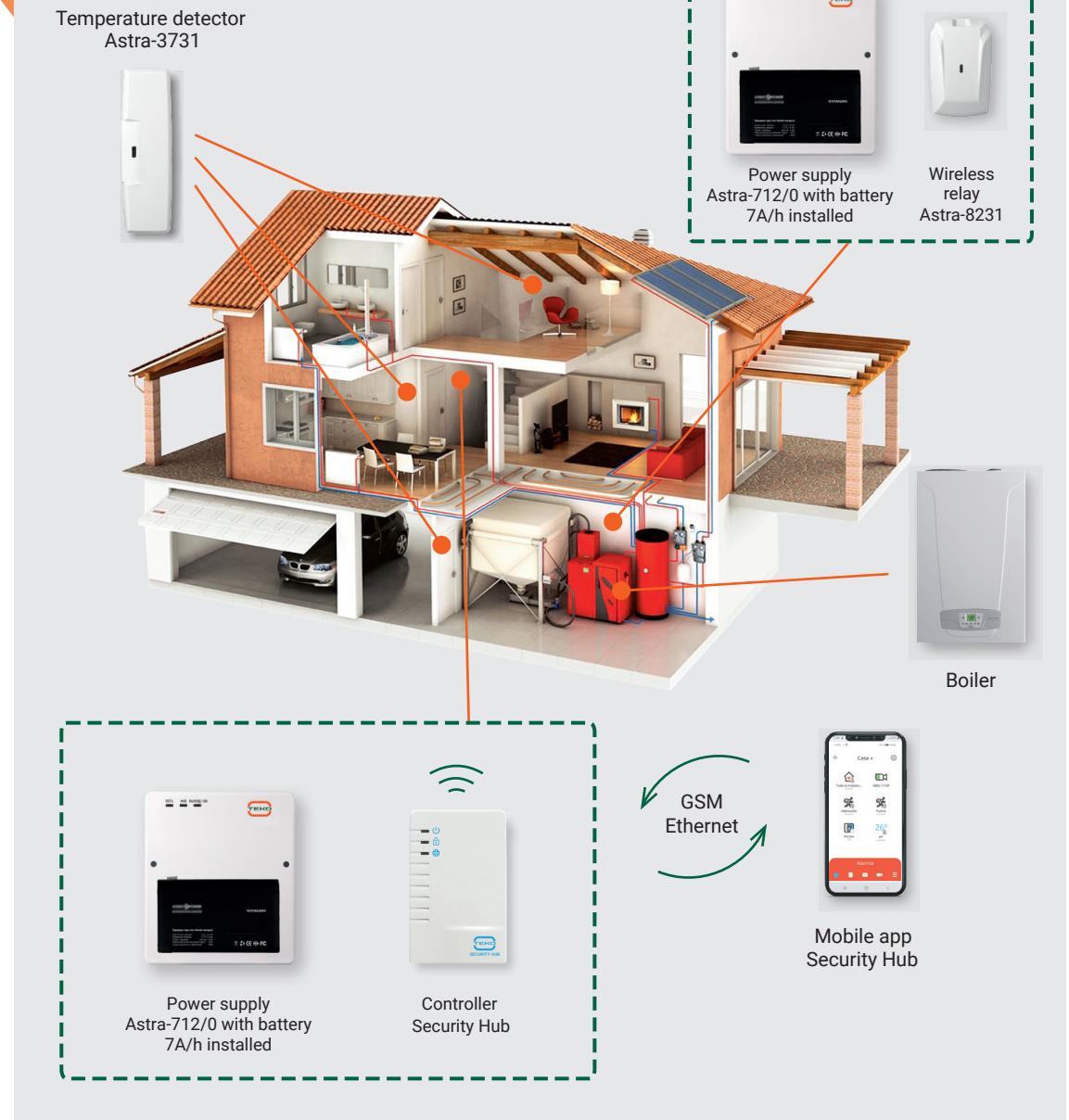
A simple solution to the current task using wireless temperature detectors Astra-3731, wireless relay unit Astra-8231 and Security Hub controller.

Data from the controller transferred to the user's smartphone. By using mobile application Security Hub user can turn on/off climate control and control the heating boiler.

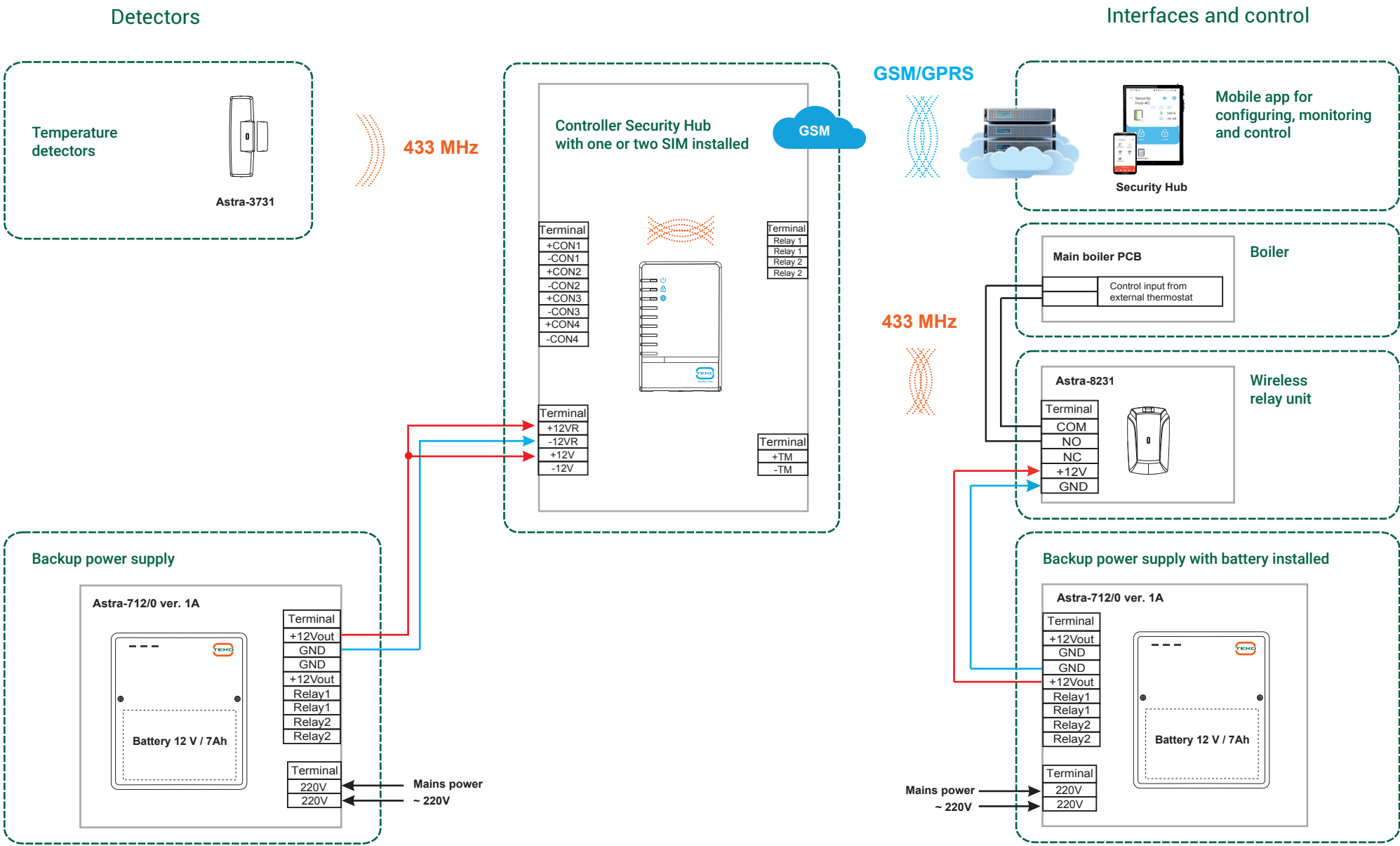
## Solution is intended for

- **Maintaining the temperature**
  - Automatic control of the boiler according to the maintenance threshold temperature. Threshold values are set in the settings of the Security Hub controller.
- **Control the current temperature**
  - Temperature monitoring in the mobile application.
- **Prevent the consequences of an accident in the heating system**
  - If the temperature is too high or too low, there is a possibility of an accident. When a critical temperature is reached, an alert is sent to the user's smartphone.

## COMFORTABLE



# Wiring diagram



The diagram shows a typical technical solution for common boilers.  
The boiler must be capable of being controlled by a connected external room thermostat.  
Instead of a expensive thermostat in solution wireless temperature detector Astra-3731 is used. To control high temperatures (up to +125°C) an external sensor DS 18B20 can be connected to the Astra-3731 (external sensor not included in the delivery set).

In the settings of the boiler, up to 80% of the power must be set. Boiler must be switched to the heating on mode when the control input contacts of the external thermostat are closed and operate in the "Demand for heat" mode from external regulator or thermostat. The boiler is controlled by a high-current relay output of the Astra-8231 relay unit.





# ADDRESSABLE FIRE ALARM SYSTEM FOR OFFICE. EVACUATION AND SMOKE EXHAUST SYSTEM

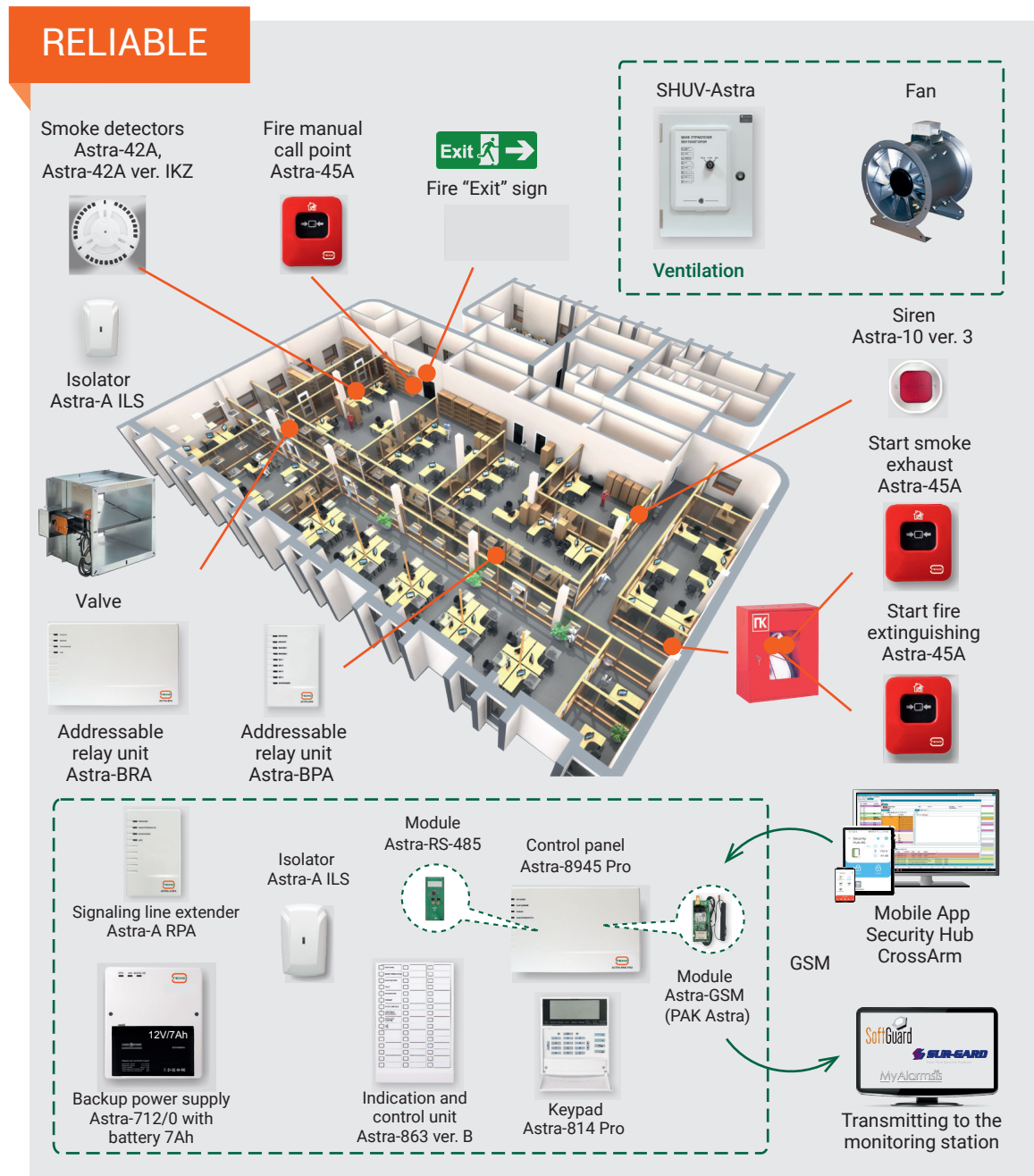
Typical solution for addressable fire alarm, evacuation and smoke exhaust systems, using Astra-A system.

The solution includes detectors, sirens and control units:

- for smoke detection - smoke detectors Astra-42A and Astra-42A ver. IKZ
- for manual start of systems - manual call points Astra-45A
- for evacuation system - light and sound sirens Astra-10 ver. 3, fire "Exit" signs
- for manual start of smoke exhaust system - manual call points Astra-45A
- for manual activation of the pump-station of the internal firefighting plumbing - manual call points Astra-45A
- for controlling smoke valves - addressable relay units Astra-BRA (in «Valve» mode)
- to start the smoke exhaust fans - ventilation control cabinets SHUV-Astra

Control of the system by PIN-codes with Astra-814 Pro keypads, Touch Memory keys, buttons on the Indication and control unit Astra-863 ver. B.

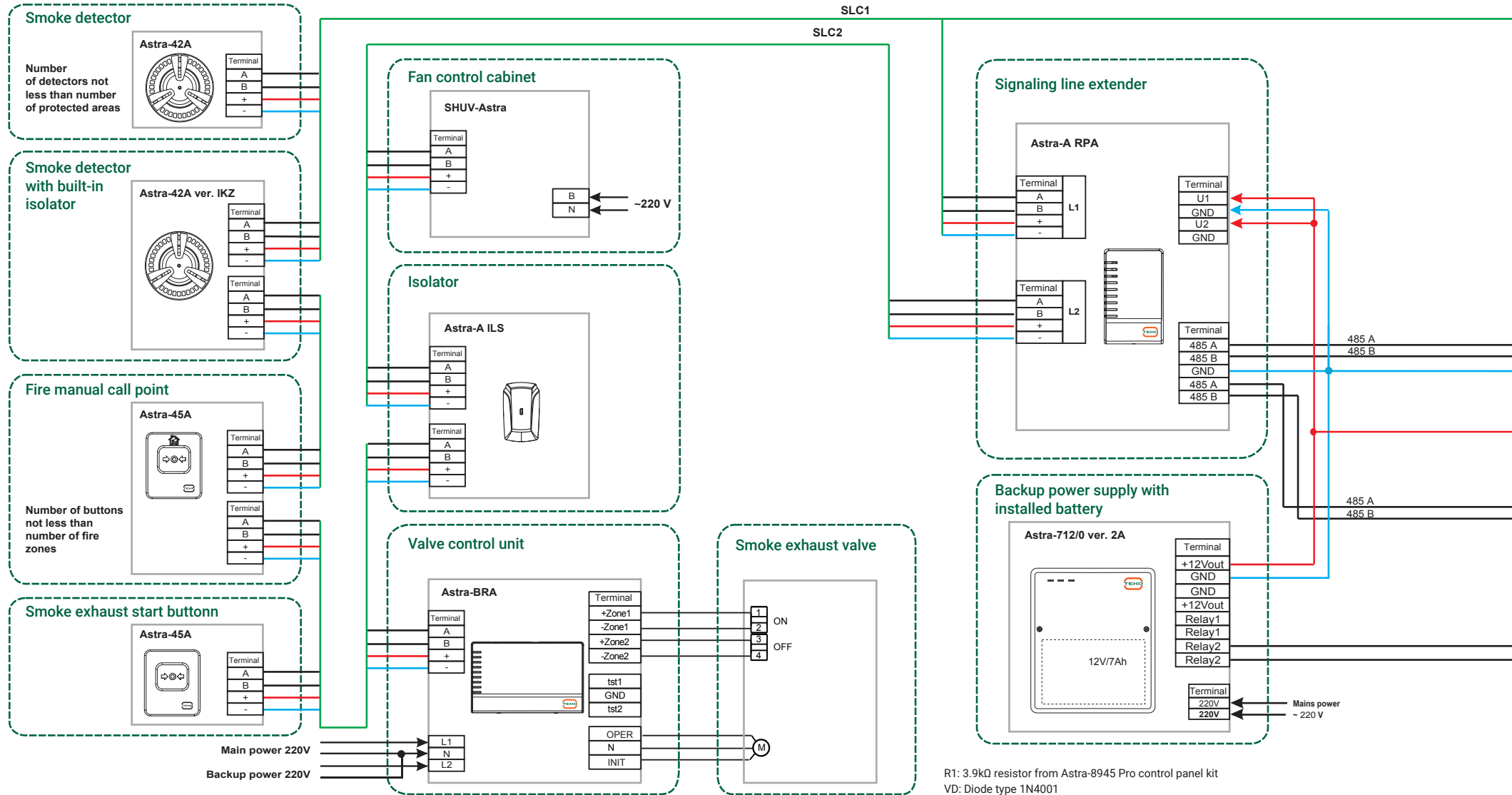
Fire alarm notifications are carried out on user's smartphone. It is possible to transmit alarm notification to the monitoring station via GSM and/or Internet.



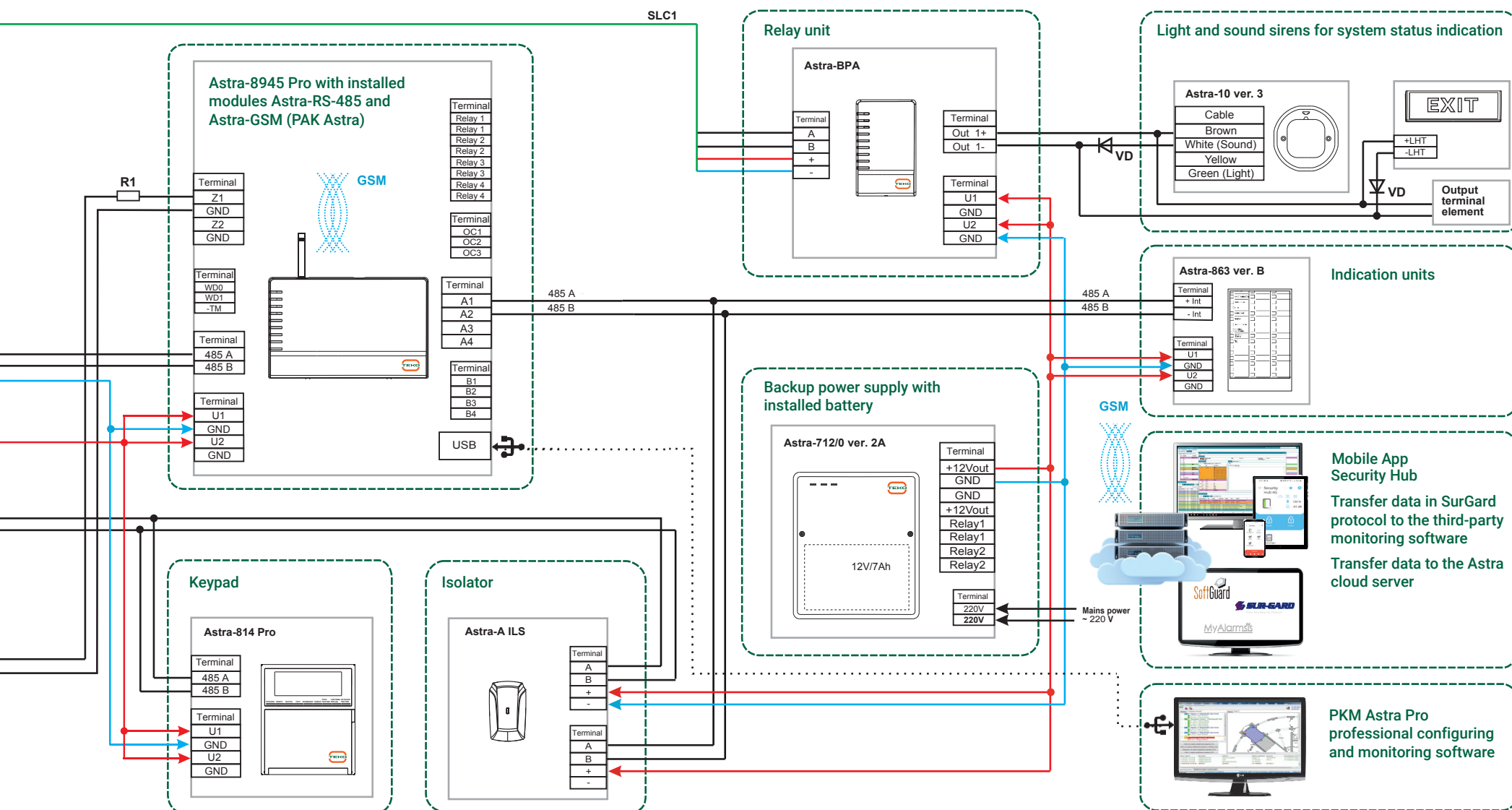
# Wiring diagram

## Detectors

## Fire automatics



## Alerting system



# EMERGENCY WATER SHUTOFF

Typical solution for automatic water shutoff in case of water leakage.

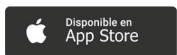
To detect water leakage wireless detector Astra-361 ver. RF is used.

Water shutoff is carried out using wireless relay and ball valve.

Ball valve control script:

- When water leaks – notification is sent to user's smartphone, valve closes
- Home/away mode – the valve closes when arming and opens when disarming, it provides

- Arming/disarming is carried out using the Touch Memory key or mobile application
- Addition – remote forced valve control via mobile application



## PRACTICAL

Water leak detector  
Astra-361 ver. RF



Electric ball valve



Power supply  
Astra-712/0 with  
7Ah battery installed



Wireless relay unit  
Astra-8231



Controller  
Security Hub



GPRS

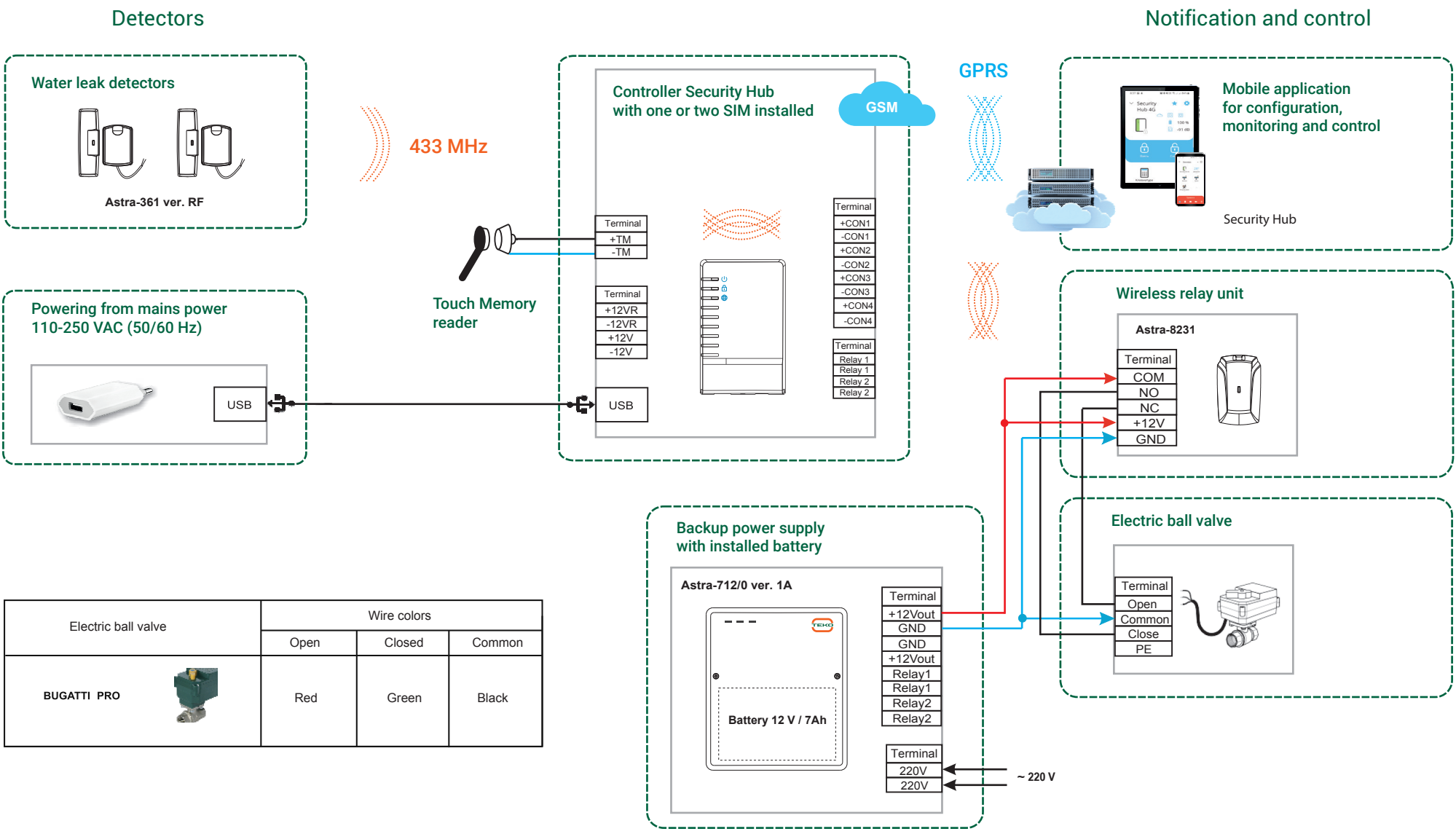


Mobile App  
Security Hub



TM reader

# Wiring diagram





# CONTROL OF ELECTROMAGNETIC LOCK USING SMARTPHONE

Typical solutions are intended for remote control of electromagnetic locks and door opening control. The control is carried out using the relay outputs of the controller Security Hub via mobile app.

## Features

- Configuration via smartphone
- Quick installation
- GSM and LAN channels for notifications
- A lot of additional wireless detectors



Disponible en  
Google play



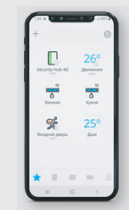
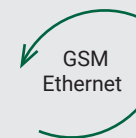
Disponible en  
App Store

## SPECIAL

Electromagnetic lock  
ML-250, AL-300



Door opening detector  
Astra-3321



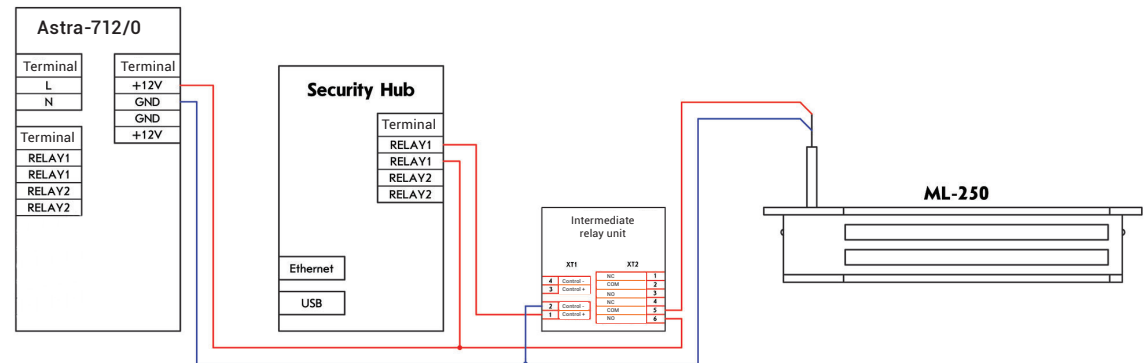
Mobile App  
Security Hub

## Wiring diagram 1 (with intermediate relay)

This diagram shows control of ML-250 electromagnetic lock. From an external power supply Astra-712/0 output voltage +12V is supplied to relay output RELAY1 of the Security Hub controller. Relay output RELAY1 is controlled remotely using mobile app, voltage is applied to the input of the intermediate relay module, then relay contacts of the intermediate relay switch and contacts 5-6 close.

Thus the output voltage of the Astra-712/0 applied to the winding of ML-250 electromagnetic lock.

Operating with this type of electromagnetic locks it is necessary to apply intermediate relay module due to the large energy consumption (ML-250 max consumption is 450 mA) and for providing galvanic decoupling of the control circuit and electromagnetic lock coil, because when switching off winding voltage there is a reverse voltage surge, which can fail the controller.

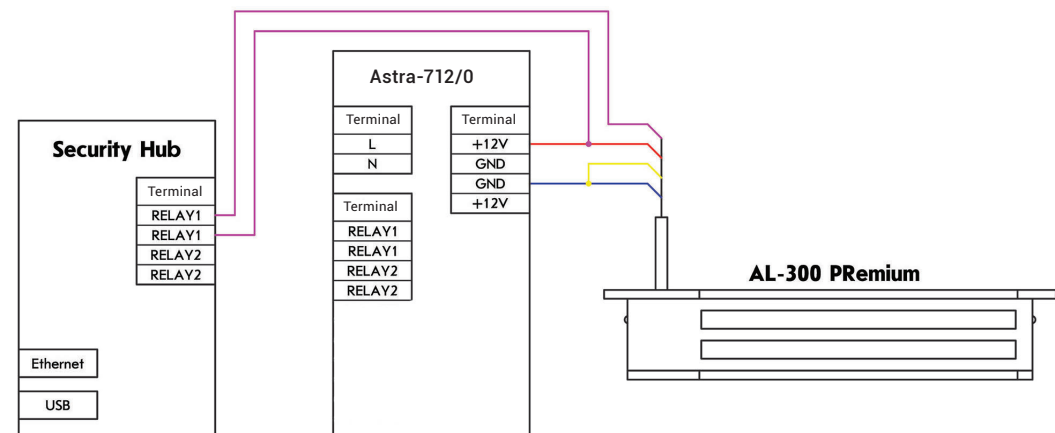


## Wiring diagram 2 (without intermediate relay)

This diagram shows control of AL-300 Premium electromagnetic lock.

This allows you to control this type of locks without intermediate relay modules, because control circuit current consumption is enough low (AL-300 Premium consumes 12 mA), and there is no reverse voltage surge at lock coil degaussing.

Output voltage +12V from power supply Astra-712/0 is applied directly to the power circuit of AL-300 Premium. Lock control is carried out by closing the control wire with +12V through relay output RELAY1 of the Security Hub controller.



# COMPLETED PROJECTS



## Quito airport cargo terminal

Ecuador, Quito

Transmitting a signal from perimeter security, monitoring, mobile application for guards



## National Museum of Azerbaijan History

Azerbaijan, Baku

Wireless security system



## Furniture and interior center "Kubatura" (area 140,000 m<sup>2</sup>)

Russia, Saint Petersburg

Smoke extinguishing and fire alarm addressable system



## Institute of advanced studies of the Ministry of Education of the Kyrgyz Republic (area 3640 m<sup>2</sup>)

Kyrgyz Republic, Bishkek

Addressable fire alarm system and evacuation system. Based on the Astra-A system



## Residential complex "Akan Sery"

Kazakhstan, Nur-Sultan

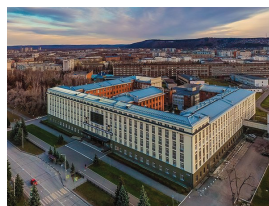
Addressable fire alarm system Astra-A



## National Museum of the Republic of Tatarstan

Russia, Kazan

Wireless security system



## Siberian State Industrial University

Russia, Novokuznetsk

Wireless fire alarm system



## Korbalkhinsky polymetallic mine (area 2150 m<sup>2</sup>)

Russia, Altai Territory

Addressable fire alarm system Astra-A



### Drama Theater named after V.I. Kachalov

Russia, Kazan

Wireless security system



### New building of ZAO NTC "TEKO"

Russia, Kazan

Addressable fire alarm system and evacuation system



### Massandra Palace

Russia, Yalta

Wireless security and fire alarm system



### "MANGO" residential complex

Russia, Kazan

Addressable fire alarm system



### Vorontsov Palace

Russia, Alupka

Wireless security and fire alarm system



### Sakhalin Regional Museum of Local History

Russia, Yuzhno-Sakhalinsk

Wireless security system



### Livadian Palace

Russia, Yalta

Wireless security and fire alarm system



### Institute of Earth magnetism, ionosphere and radio wave propagation

Russia, Troitsk

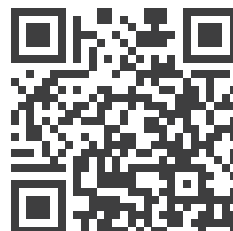
Wireless fire alarm system

# TEKO-TD LLC

Prospekt Pobedy 19, Kazan, Russia  
+7 967 368 0898



Catalog



Website



YouTube



[export@teko.biz](mailto:export@teko.biz)

[www.teko.biz](http://www.teko.biz)