en Operating instructions

Wireless I/O module
5251 16

10869900 34/22

GIRA

General safety instructions

Electrical devices may only be installed and connected by a qualified electrician.

Improper installation may result in serious injury, e.g. from electrical shock or fire, as well as equipment damage.
This product contains a battery.
Do not swallow batteries. Risk of burns from hazardous materials.
Immediately seek medical attention if batteries have been swallowed or inserted into any part of the body.
Keep new and used batteries away from children.
These instructions are part of the product and must remain with the end customer.

Observe the commissioning order

Commissioning order for the security system Alarm Connect:

1. Mount the alarm control unit and put it into commission (battery and 230 V connection).
2. Configure the project in the GPA and transfer it to the alarm control unit memory.
3. Install all other devices, put into commission (insert batteries, etc.) and check the wireless connection to the alarm control unit.
4. After successful verification, set the alarm control unit to operation mode.

Failure to observe the commissioning sequence will render commissioning of the safety system unsuccessful.

Product features

The wireless I/O module is used to receive and forward wired signals. Wired components (e. g. wired window contact at the input and siren at the output) can be connected to the four inputs and outputs. The inputs and outputs are configured in the GPA and respond accordingly to the configuration in case of an event.

Sticker with Hardware ID

The device comes with two stickers with the Hardware ID. You can use one of the two stickers for your site map and simply scan the Hardware ID with an appropriate scanner during configuration in GPA.

Included in delivery

- 1 x wireless I/O module
- 1 x set of mounting hardware
- 1 x Battery
- 1 x operating instructions
- 2 x stickers with Hardware ID

Ensure the package contents are complete and undamaged. Please see “Warranty” in case of any defects.

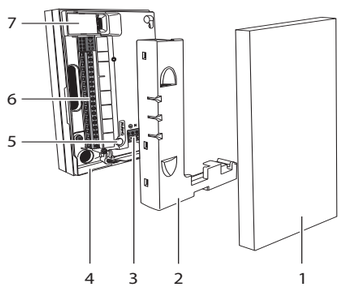
Required accessories

- Alarm control unit Connect (item no. 5201 00)
- Wireless operating unit (item no. 5212 03)

Accessories

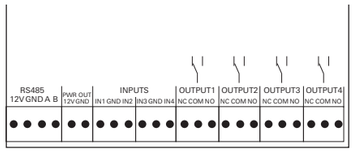
- Adapter frame, surface-mounted, for wireless I/O module (item no. 5252 16)

Device description



1 Upper housing section
2 Cover: Connection terminals
3 Port: AC 230 V
4 Lower housing section
5 Pairing button
6 Connection terminals
7 Battery compartment

Connection terminals



Terminal	Name	Function
RS485	12 V	Not assigned, reserved for future applications
	GND	
	A	
	B	
PWR OUT	12 V	Power supply for OUTPUT 1 to 4
	GND	Quantity (Ground)
INPUTS	IN1	Input 1
	GND	Quantity (Ground)
	IN2	Input 2
	IN3	Input 3
	GND	Quantity (Ground)
	IN4	Input 4
OUTPUT 1 to 4	NC	Port: NC contact
	COM	Port: voltage
	NO	Port: NO contact

Mounting the wireless I/O module

VdS-compliant mounting

Only mounting with wall plugs and screws is VdS-compliant.

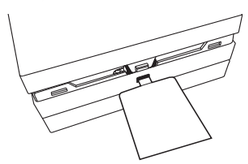
Wall installation

Make sure the wall surface is level. In the case of an uneven wall surface, there is the risk that the lower housing section will move during installation. This means that the upper housing section cannot be plugged in properly.

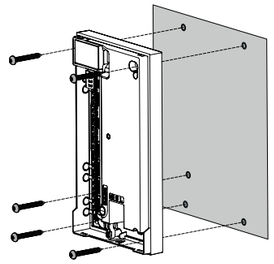
Socket outlet for power supply

Be sure that the I/0 device is mounted near a socket outlet that is easily accessible. The socket outlet should have its own fuse circuit.

1. Switch off the power supply.
2. Detach the upper housing section from the lower housing section using the unlocking tool using the unlocking tool (included with the alarm control unit Connect).



3. Remove and set aside the cover for the connection terminals.
4. Mark the drilling holes, drill and insert the wall plugs (Fischer dowels UX 5 x 30, included). The disconnecting surface of the tamper contact must be secured with a screw.
5. Mount the wireless I/O module.

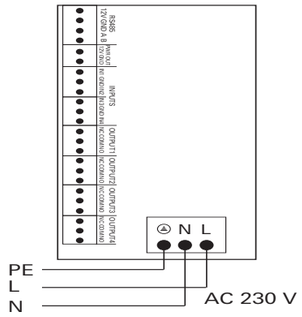


6. Wire the wireless I/O module according to the application.

Wire the wireless I/O module.

Connection - Mains voltage

Use power lines with a cable cross-section of 1.5 to 2.5 mm^2. The power line should comply with national electrical requirements.



Connecting the inputs

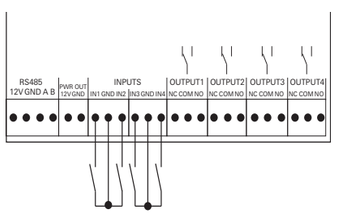
Connection cable for inputs

The following cable type can be connected to the inputs:
IY(ST)Y with Ø 0.6 to 0.8 mm, max. Length 100 m.

Wired sensor resistance

Only connect wired sensors without resistance (0 Ω).

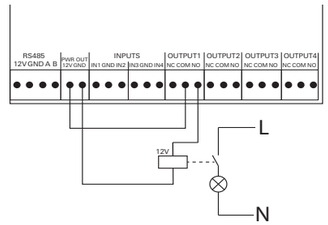
An example of connecting the inputs are shown below.



Terminal	Name	Function
INPUTS	IN1	Input 1
	GND	Quantity (Ground)
	IN2	Input 2
	IN3	Input 3
	GND	Quantity (Ground)
	IN4	Input 4

Connecting the outputs

An example of connecting the outputs is shown below.



Terminal	Name	Function
PWR OUT	12 V	Power supply for OUTPUT 1 to 4
	GND	Quantity (Ground)
OUTPUT 1	NC	Port: NC contact
	COM	Port: voltage
	NO	Port: NO contact

7. Re-attach the cover for the connection terminals.

Protection function of cover for the connection terminals

When attached, the cover for the connection terminals ensures that the low voltage is separated from the mains voltage.

Commissioning the wireless I/O Modul

Conditions for device commissioning

The project must first be successfully commissioned in GPA (see "Commissioning order").

Gira Project Assistant (GPA)

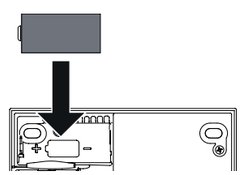
The security system Alarm Connect is configured via GPA. The following settings are made in GPA for the wireless I/O module in the GPA:

- Enter device name.
- Assign device ID.
- Configure inputs and outputs.
- Put the project into commission.

1. Configure the project in the GPA and put it into commission.
2. Insert battery (**observe polarity!**) and wait for initialisation phase. The wireless I/O module is automatically detected by the wireless alarm control unit Connect.

Batteries inserted too early

If the units have been activated before start-up, they are in "sleep mode" and can no longer connect to the alarm centre. In this case, the batteries must be removed and reinserted.



3. Attach the upper housing section to the lower section.
4. Switch on power supply.

Status LED

Behaviour	Meaning
Lights up red continuously	Tamper alarm
Alternates quickly between green and red	Initialisation phase
Blinks red, quickly and for a max. of 10 s	Error initialisation phase
Blinks green, quickly and for a max. of 5 s	Registration phase
Lights up green for approx. 3 s, then turns off	Registration successful
Blinks red in short intervals for a max. of 10 s	Registration error
Blinks green, quickly every 2 s and in cases of a status change, 1x quick red flash	Test run

Stand-by mode

After commissioning of the device, communication must take place between the device and the alarm control unit Connect within 7 min. After 7 min the device automatically switches to stand-by mode. If the device does not receive a signal from the alarm control unit Connect within the 7 min period, the stand-by mode can not be ended automatically.
The device must then be reactivated (remove and replace the battery) so that communication can be established with the alarm control unit Connect. Always observe the commissioning order.

Check the signal quality of the wireless connection

Check the wireless connection to the alarm control unit

Check the signal quality of the wireless connection between the alarm control unit Connect and the device.

1. Activate the test mode in the GPA under [security system] -> [Diagnosis and test]. The wireless I/O module automatically sends a signal.
2. Check the signal quality.
   Bad signal quality: Insert a wireless repeater and check the signal quality again.
   Good signal quality: End test mode.

Behaviour in case of mains failure

In the event of a mains voltage failure, the internal back-up battery will supply the wireless I/O module with power.
The receipt of signals on the input side is still ensured via the back-up battery. Only the devices connected to the outputs are no longer supplied.
When the mains voltage returns, the back-up battery does not charge back up on its own.

Replacing the battery

WARNING

Explosion hazard in case of improper handling of batteries.

Do not throw batteries into the fire, and do not recharge batteries, as this may result in a risk of explosion.

WARNING

Danger of acid burns from bursting or leaking batteries.

Always change an empty battery for a new one of the same type.

Replacing the battery

Replace the battery as soon as the "low battery" display appears in the Display of the wireless operating unit.

1. Detach the upper housing section from the lower housing section using the unlocking tool using the unlocking tool (included with the alarm control unit Connect). The tamper alarm is triggered.
2. Open the battery compartment and replace the battery with a new battery of the same type (**Observe polarity!**).
3. Close the battery compartment and place the upper housing section on the lower section again.
4. Acknowledge the tamper alarm on the wireless operating unit.

Technical data

Power supply	
External:	Type A: AC 230 V, 50/60 Hz
Internal (additional):	Type B: Internal back-up battery
Rated output:	12 W
Back-up battery	
Type:	CR 123A
Capacity:	1.4 Ah
Voltage:	3 V
Quantity:	1
Battery life	
With battery operation:	approx. 1 week
With 230 V supply:	approx. 5 years
Connections	
AC 230 V:	1 x plug terminal
Input:	4 x zero-voltage relay contact
Output:	4 x zero-voltage relay contact
Relay:	DC 12 V; 1.5 A
Max. load limitation 12 V output	
Output voltage:	DC 12 V
Total output current:	1 A
Output current per output:	250 mA
Wireless	
Frequency band:	868.0 - 868.6 MHz 868.7 - 869.2 MHz
Transmission capacity:	max. 10 mW
Range:	100 m (free field)
Device – general	
Optical display:	Status LED (red/green)
Ambient temperature:	-10°C to +55°C
Storage temperature:	-25°C to +60°C
Humidity:	93 %
Protection class:	2
Environmental class:	II
Compliant with:	EN 50131 Level 2 EN 62368-1 EN 301489-1 EN 301489-3 EN 61000-6-3 EN 50130-4 EN 300220-1 EN 300220-2 EN 50130-5 EN 50131-1 EN 50131-3 EN 50131-6 EN 50131-5-3
Certification body:	Telefication B.V.
Dimensions (H x W x D):	170 x 100 x 40 mm

Conformity

Gira Giersiepen GmbH & Co. KG hereby declares that the wireless system type item no. 5251 16 conforms to Directive 2014/53/EU. The complete text of the EU Declaration of Conformity can be found either in the download area (gira.de/Konformitaet), or directly via the online catalogue at the product (katalog.gira.de).

Disposal

The Gira wireless I/O module is an electric or electronic device in the sense of EU Directice 2011/65/EU. High-quality materials and components were used in developing and manufacturing the device. These materials and components can be reused and recycled. Please consult the regulations governing the separate collection of electric/electronic waste applicable for your country. These devices may not be disposed of with household waste. The correct disposal of waste can prevent possible negative consequences to the environment and humans.

Warranty

The warranty is provided in accordance with statutory requirements via the retailer. Please submit or send faulty devices postage paid and with an error description to your sales representative (retailer / installation company / electrical contractor). The salesperson will forward the devices to the Gira Service Centre.

Gira

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Electrical installation systems

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