



Forteza Integration Module Settings Guide

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List of terms used in Forteza integration module Settings guide

Perimeter Intrusion Detection System (PID) is a hardware-software system used to control perimeter violation.

Intellect Server is a computer with installed *Intellect* software (**Server** configuration).

Forteza sensors are annunciators used to secure premises and perimeter zones (depending on the type of a connected sensor) and to notify about alarm when a violator enters the area.

Zebra sensor is a single-ended radio-wave annunciator used to secure perimeter zones, outdoor and indoor sites, storage facilities, tunnels, viaducts and to notify about alarm when a violator enters the area.

Introduction into Forteza integration module Settings guide

On the page:

- [Purpose of document](#)
- [General information about Forteza integration module](#)

Purpose of document

The *Forteza integration module Settings guide* is a reference guide for users of the *Forteza* module that is a part of *ACFA Intellect* software package.

The guide provides:

1. general information about *Forteza module*;
2. information about how to configure *Forteza module*;
3. information about how to work with *Forteza module*.

General information about Forteza integration module

Forteza software module is a part of *ACFA Intellect* software package. It configures and enables interaction between *ACFA Intellect* and *Forteza PID* (manufactured by JSC "Ohrannaya Technika").

Note.

For more information about *Forteza PID*, please refer to official documentation for this system.

Before configuring *Forteza PID* integration module, do the following:








1. install *Forteza PID* hardware at the site (see vendor documentation);
2. connect *Forteza PID* to Server.


Integration with Forteza

Manufacturer	Okhrannaya technika, Ltd. Zarechny, Penza region, Russia, 442960, P.O.box 45 Tel/fax: +7-8412-65-53-16 (multi-channel) E-mail: info@forteza-eu.com
Integration type	Low-level protocol

Equipment connection	RS-485
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Supported equipment

Equipment	Function	Features	Photo
Forteza-Adapter	Adapter of external devices	<p>Converts signal from voltage free output to RS-485 interface</p> <p>Provides possibility of connection two detecting devices</p>	
Forteza-Controller	Controller of executive devices	<p>Provides control of two devices, transmitting information about relay contact state</p>	
FM Series	Microwave monostatic sensors	<p>Division of detection area into 12 sub zones</p> <p>Several modifications with length of detection area for 84, 60, 30 m.</p> <p>Authorized access by disabling sub zones</p>	
Forteza series	Microwave bistatic sensors	<p>Several modifications with length of detection area for 500, 300, 100, 50 m.</p> <p>Up to four-frequency letters – eliminates ambient illumination from other sensors</p> <p>Working frequency 24 GHz</p>	
Security Light LED series	LED seachlight	<p>Control of lighting level</p> <p>Missing of ambient illumination of video surveillance cameras by means of directed focused lighting</p> <p>Continuous light flux in all range of power supply</p> <p>Resistant to low input voltage drops</p>	
MIR-M series	Dual-technology monostatic sensors	<p>Several modifications with length of detection area for 30, 10 m.</p> <p>High survivability</p> <p>Two different physical principles of detection are applied: monostatic microwave and monostatic infrared</p> <p>Division of detection area into 12 sub zones</p>	
RELIEF series	Wire&Wave sensor	<p>Self-diagnostic and fault indication modes are supported</p> <p>Ability to install on all types of barriers</p> <p>Protection of fences of complex configuration, tracking relief and perimeter turns</p>	

MIR-B series	Dual-technology bistatic sensors	<p>Several modifications with length of detection area for 50, 100 m.</p> <p>High survivability</p> <p>Two different physical principles of detection are applied: microwave and active infrared</p> <p>Ultra narrow detection area</p>	
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License Protection

Per 1 COM-port.

No more than 32 devices can be connected to one COM-port.

Forteza-Adapter converts the signal from the dry relay contacts to the RS-485 interface. Two sensors can be connected to one Forteza-Adapter. Dry contacts from the sensors connect to Forteza-Adapter, and information about the dry contacts state is transmitted via the RS-485 interface from the adapter to the Intellect software.

Forteza-Controller is intended for connecting actuators to the security system and controlling them with the "normally-open" relay contacts. For example, a siren is an actuator.

Configuring Forteza integration module

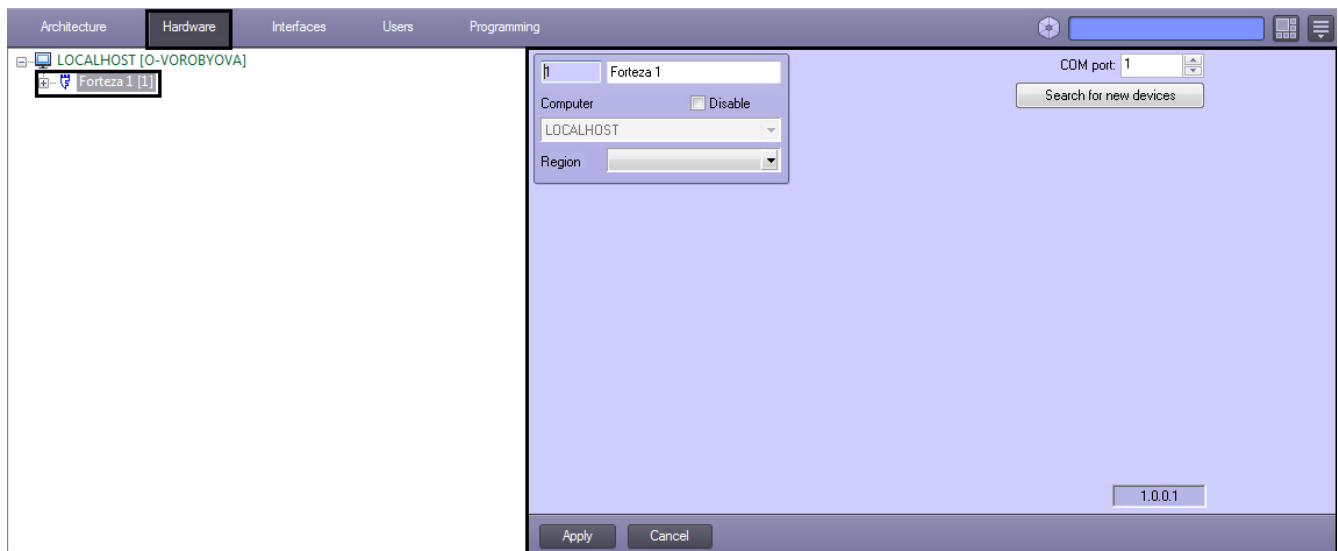
Forteza integration module set up procedure

Forteza PID integration module is configured in *ACFA Intellect* as follows:

1. Activation of *Forteza* integration module;
2. Automatic creation of the object tree
3. Configuration of *Forteza* sensors.

Activation of Forteza integration module

In order to activate *Forteza* integration module create a **Forteza** object under the **LOCALHOST** object in the **Hardware** tab of the **System settings** dialog box.



Note.

An integration module version is shown on the **Forteza** settings panel.

PID *Forteza* integration module is now activated.

Automatic creation of the object tree in Forteza PID

When the object tree is created automatically, there is the search for devices connected to the Server and corresponding objects are created under the **Forteza** object in *ACFA Intellect* object tree.

Automatically create the object tree as follows:

1. Go to the **Forteza** object settings panel.

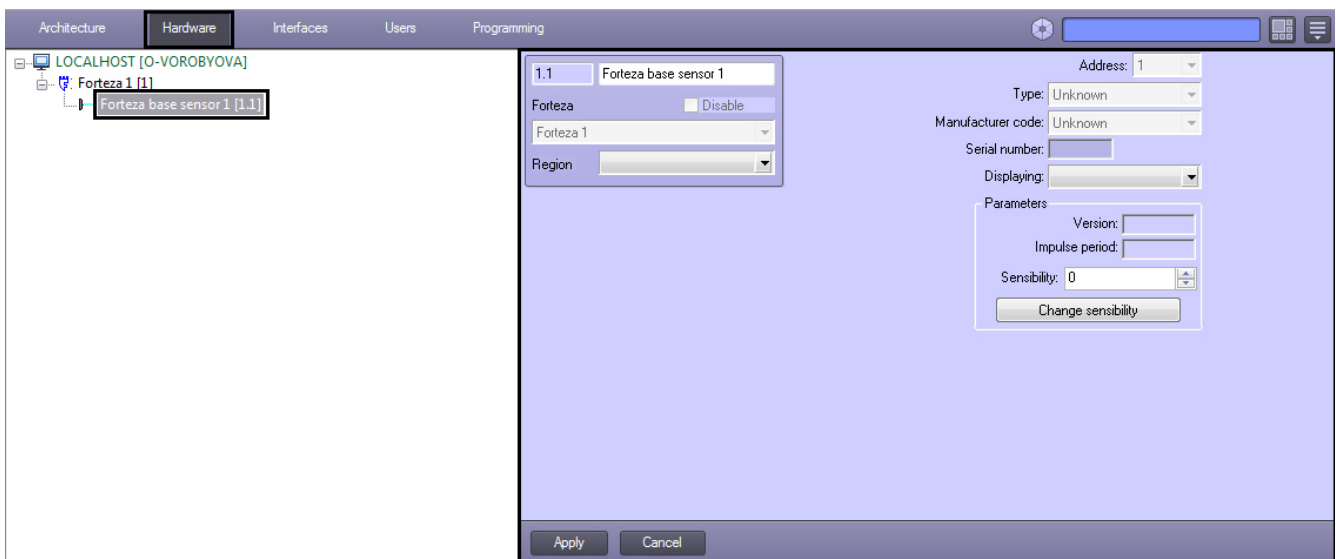


2. In the **COM port** field specify the number of port to connect *Forteza PID* to the Server (1).
3. Click the **Apply** button (2).
4. Click the **Search for new devices** button for automatic creation of the object tree (3).

Automatic creation of the object tree is completed.

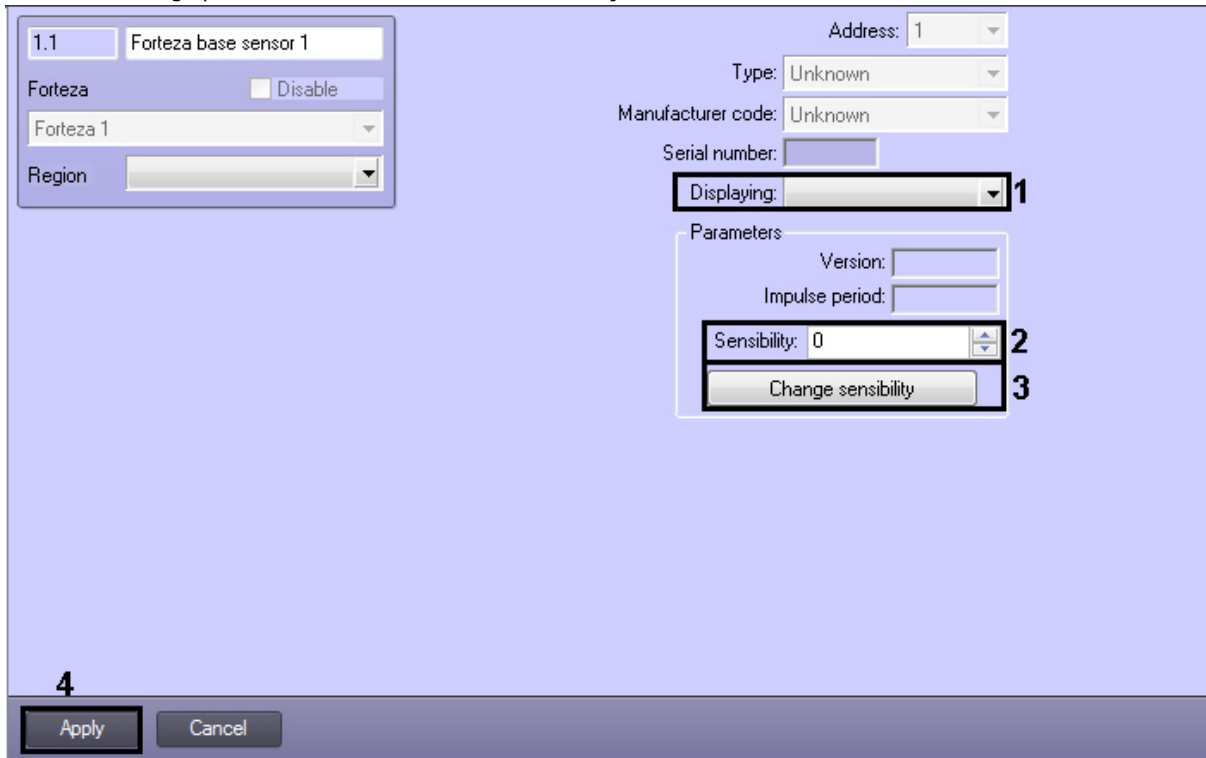
Configuring Forteza base sensor

In *ACFA Intellect* the *Forteza* base sensor is configured on the settings panel of the **Forteza sensor** object. This object is created under the **Forteza** object in the **Hardware** tab of the **System settings** dialog box.



Configure *Forteza* base sensor as follows:

1. Go to the settings panel of the **Forteza base sensor** object.

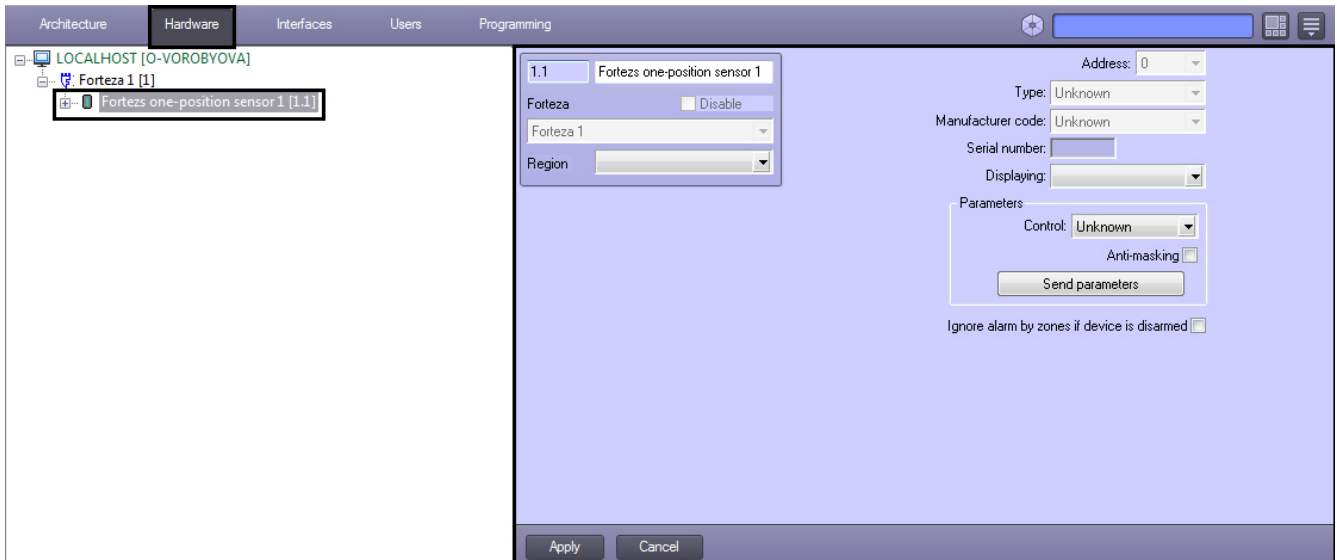


2. From the **Displaying** drop-down list select set of icons corresponding to base sensor (1).
3. In the **Sensibility** field specify level of sensor sensibility (2).
4. Click the **Change sensibility** button (3).
5. Click the **Apply** button to save changes (4).

Forteza base sensor is configured.

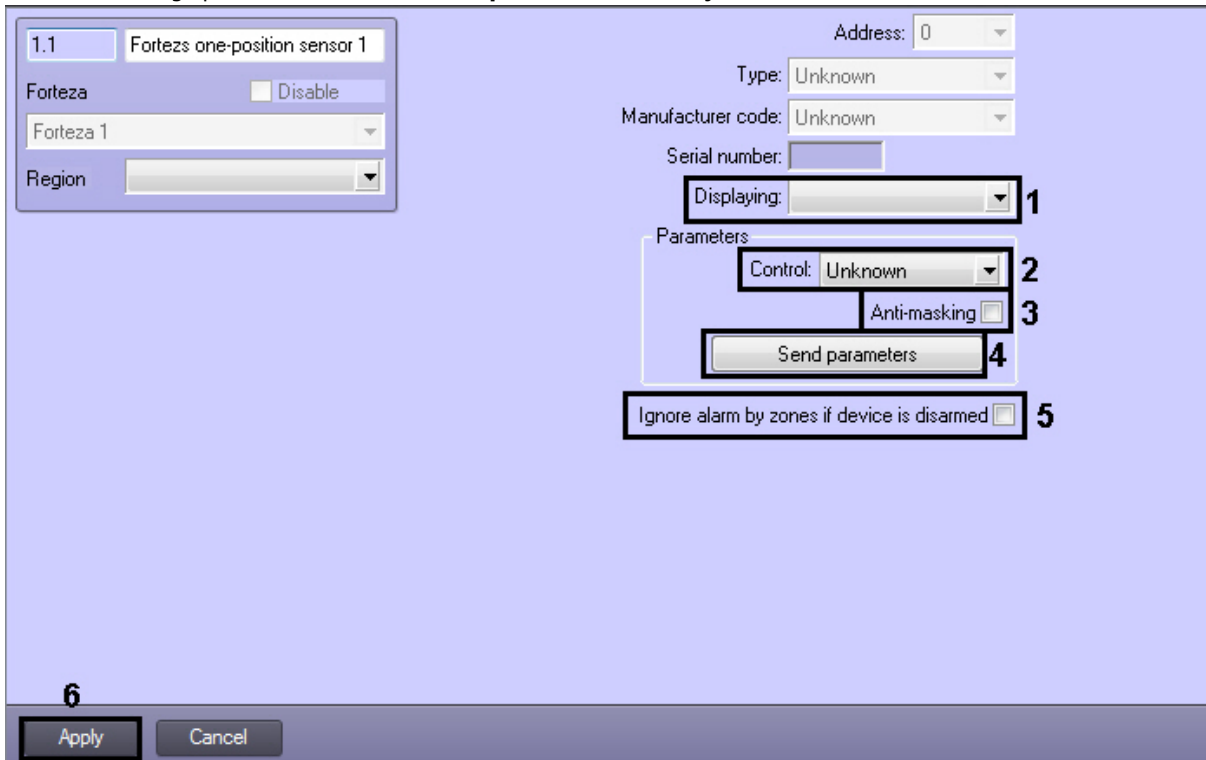
Configuring Forteza one-position sensor

In *ACFA Intellect* the *Forteza* one-position sensor is configured on the settings panel of the **Forteza one-position sensor** object. This object is created under the **Forteza** object in the **Hardware** tab of the **System settings** dialog box.



Configure *Forteza* one-position sensor as follows:

1. Go to the settings panel of the **Forteza one-position sensor** object.

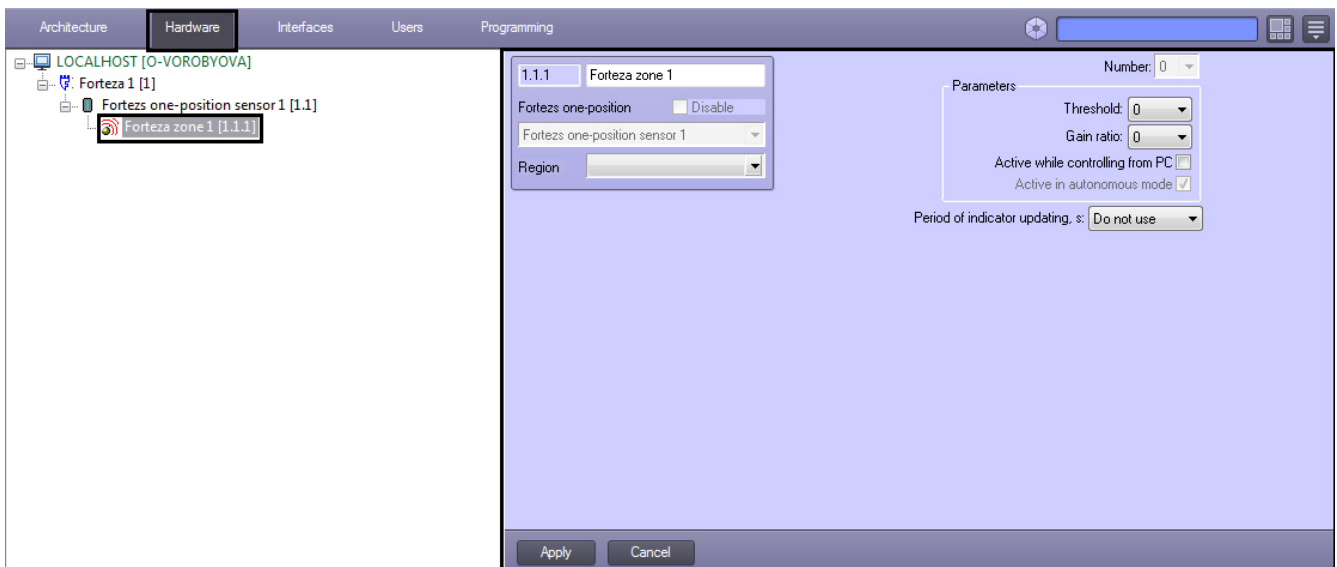


2. From the **Displaying** drop-down list select set of icons corresponding to one-position sensor (1).
3. From the **Control** drop-down list select the way of sensor control. It's possible to control sensor independently or using a computer (2).
4. If an alarm event is to be generated in the system when an attempt to cover sensor with reflecting layer is detected, set the **Anti-masking** checkbox checked (3).
5. To send parameters to device click the **Send parameters** button (4).
6. If it's required to ignore alarm events when device is disarmed, set the corresponding checkbox (5).
7. Click the **Apply** button to save changes (6).

Forteza one-position sensor is configured.

Configuring area of Forteza one-position sensor

In *ACFA Intellect* the area of the **Forteza** one-position sensor is configured on the settings panel of the **Forteza zone** object. This object is created under the **Forteza one-position** object in the **Hardware** tab of the **System settings** dialog box.

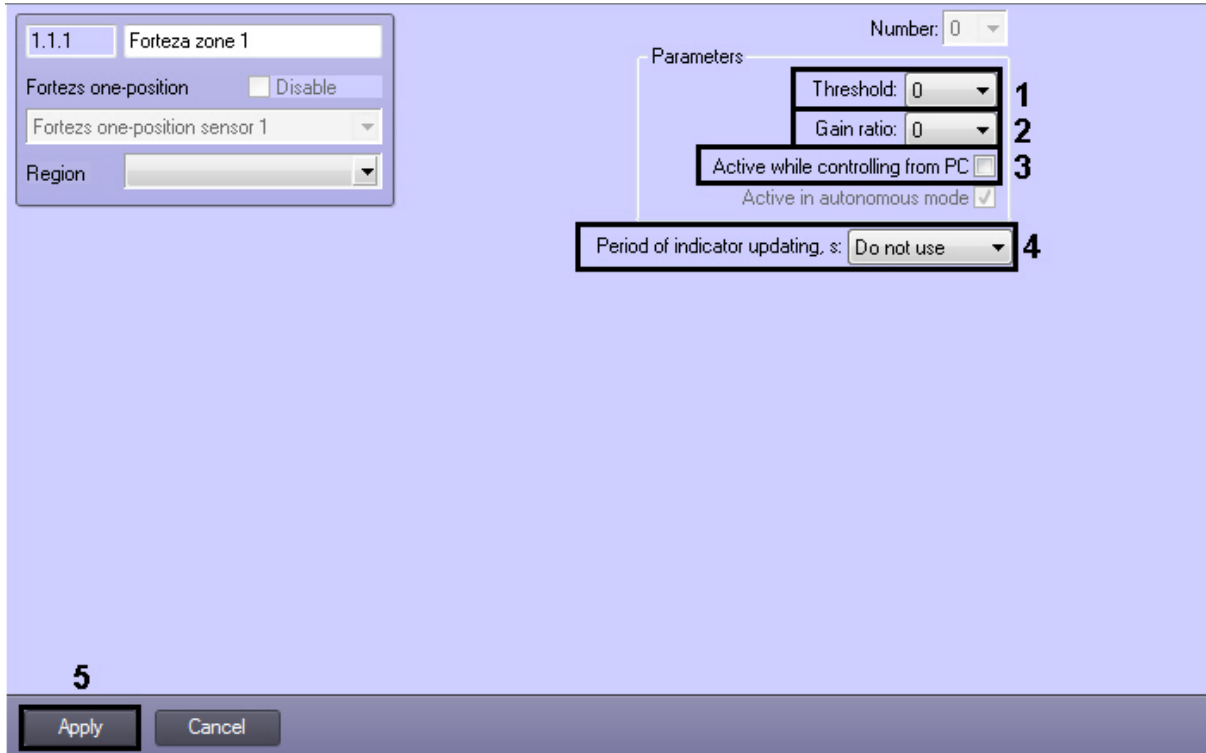


Note.

Forteza one-position sensor supports 12 areas.

Configure area of *Forteza* one-position sensor as follows:

1. Go to the settings panel of the **Forteza zone** object.

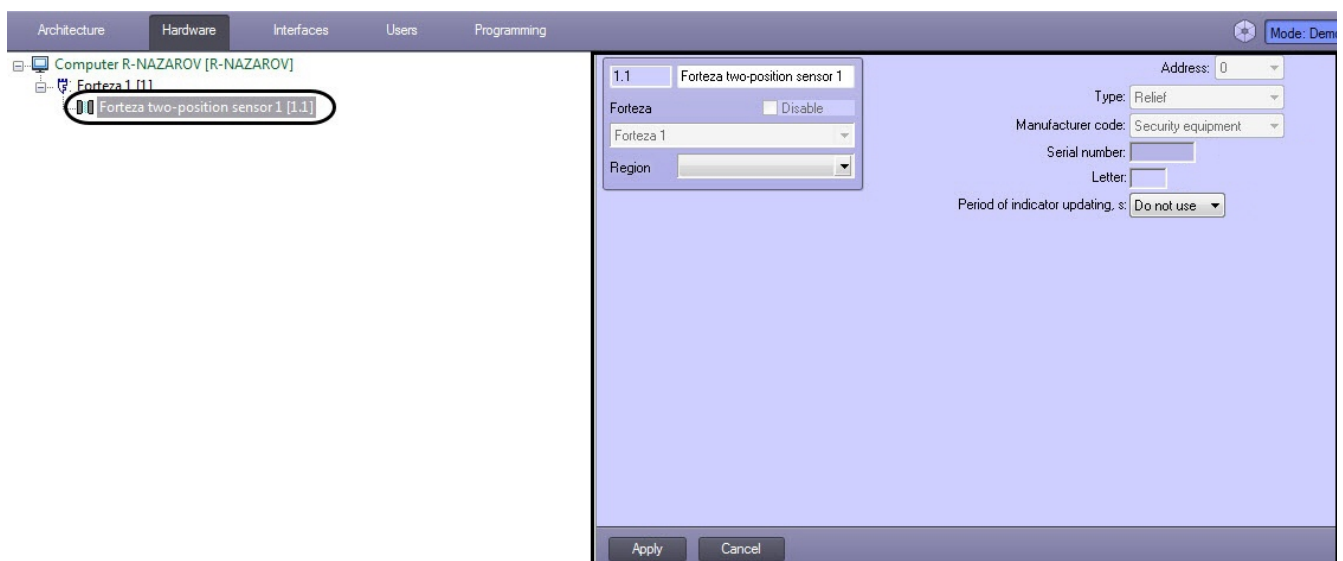


2. From the **Threshold:** drop-down list select value of sensibility threshold (1).
The minimum sensitivity of the sensor corresponds to the maximum value of the **Threshold** parameter, i.e. the bigger the value of this parameter, it is more probable that alarm event will be skipped.
3. From the **Gain ratio:** drop-down list select value of area sensor signal gain (2).
4. If it's required to receive events from the area while controlling from PC set the corresponding checkbox (3).
5. Specify the period of indicator updating in seconds (4). Select the **Do not use** value if updating is not required.
6. To save changes click the **Apply** button (5).

Area of *Forteza* one-position sensor is configured.

Configuring Forteza two-position sensor

In *ACFA Intellect* the *Forteza* two-position sensor is configured on the settings panel of the **Forteza two-position sensor** object. This object is created under the **Forteza** object in the **Hardware** tab of the **System settings** dialog box.



Configure *Forteza* two-position sensor as follows:

1. Go to the settings panel of the **Forteza two-position sensor** object.

The screenshot shows a settings window for the 'Forteza two-position sensor 1' object. The window has a light blue background. On the left, there is a sidebar with a tree view showing the object hierarchy: '1.1 Forteza two-position sensor 1', 'Forteza' (with a 'Disable' checkbox), 'Forteza 1', and 'Region'. The main area contains several configuration fields: 'Address: 0', 'Type: Relief', 'Manufacturer code: Security equipment', 'Serial number: [empty]', 'Letter: [empty]', and 'Period of indicator updating, s: Do not use'. A red '1' is placed next to the 'Do not use' dropdown. At the bottom, there are 'Apply' and 'Cancel' buttons, with a red '2' placed above the 'Apply' button.

2. Specify the period of indicator updating on the Map, in seconds (**1**). Select the **Do not use** value if updating is not required.
3. To save changes click the **Apply** button (**2**).

Forteza two-position sensor is configured.

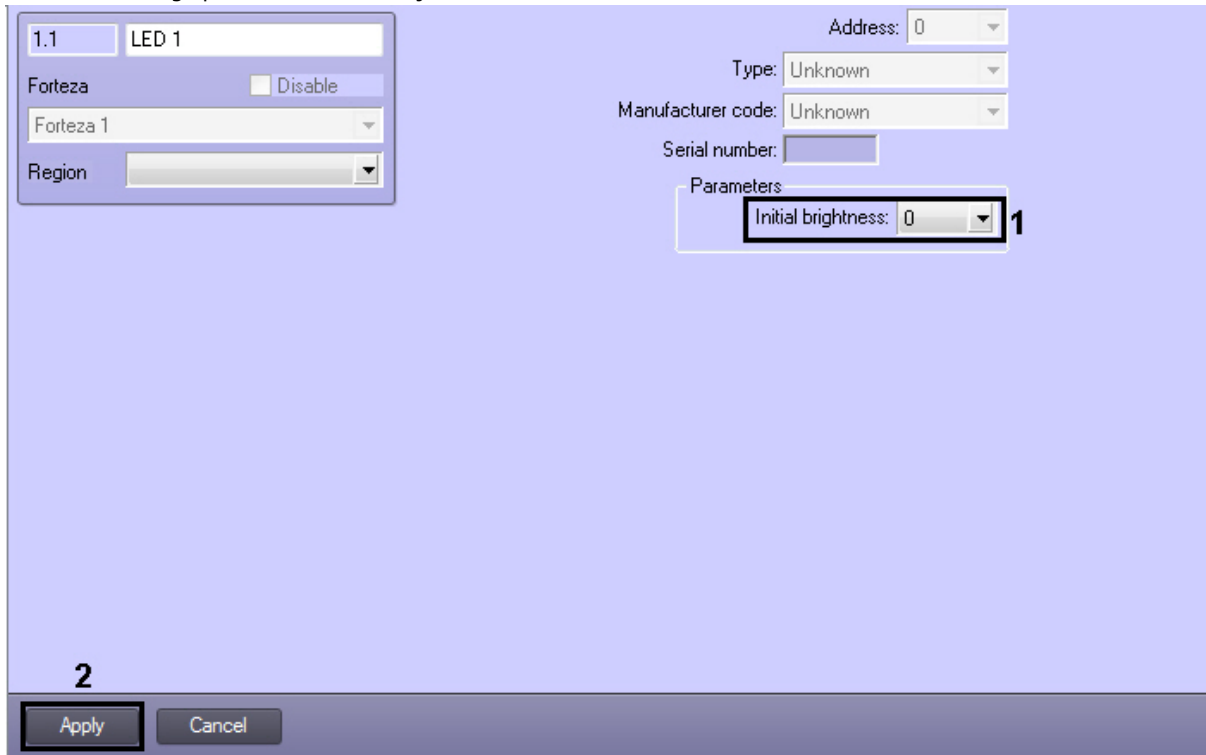
Configuring LED spotlight

In *ACFA Intellect* the LED spotlight is configured on the settings panel of the **LED** object. This object is created under the **Forteza** object in the **Hardware** tab of the **System settings** dialog box.

The screenshot shows the 'System settings' dialog box with the 'Hardware' tab selected. The left sidebar shows a tree view with 'LOCALHOST [O-VOROBYOVA]', 'Forteza 1 [1]', and 'LED 1 [1.1]'. The main area shows the settings for the 'LED 1' object. The fields include: 'Address: 0', 'Type: Unknown', 'Manufacturer code: Unknown', 'Serial number: [empty]', and 'Parameters' with 'Initial brightness: 0'. At the bottom, there are 'Apply' and 'Cancel' buttons.

Configure LED spotlight as follows:

1. Go to the settings panel of the **LED** object.

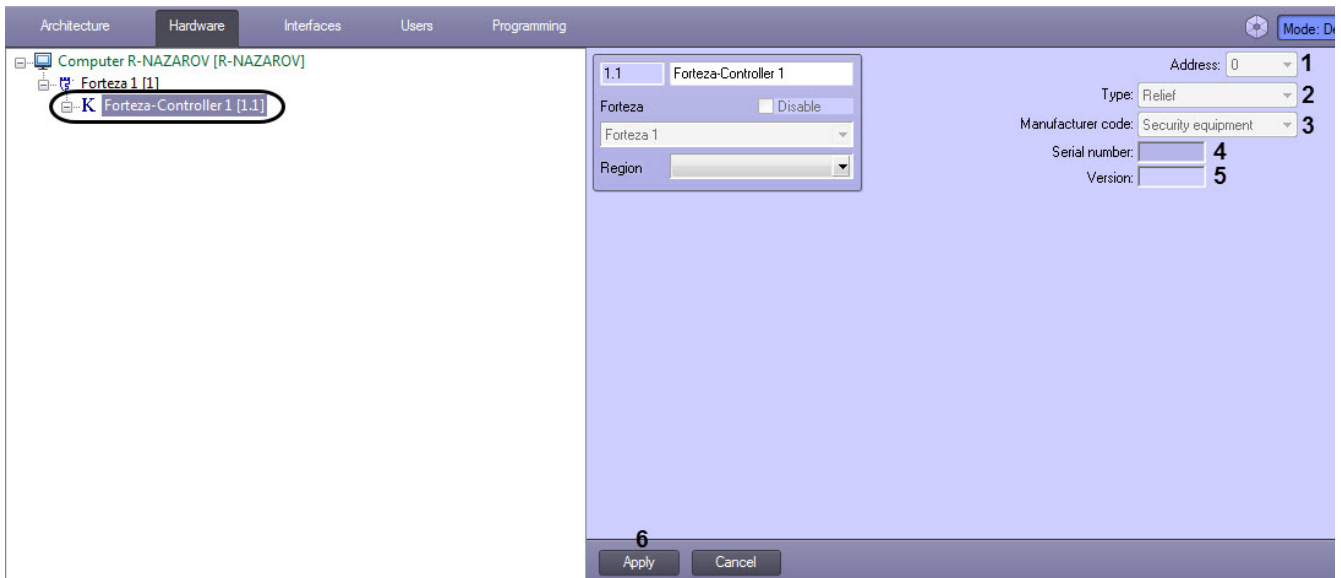


2. From the **Initial brightness** drop-down list select the value from 0 to 255 corresponding to initial brightness of LED spotlight (1).
3. Click **Apply** button to save changes (2).

LED spotlight is configured.

Configuring Forteza-Controller

The *Forteza Controller* is not configured on the settings panel of the **Forteza-Controller** object. The settings panel presents information read from the controller at its connection:



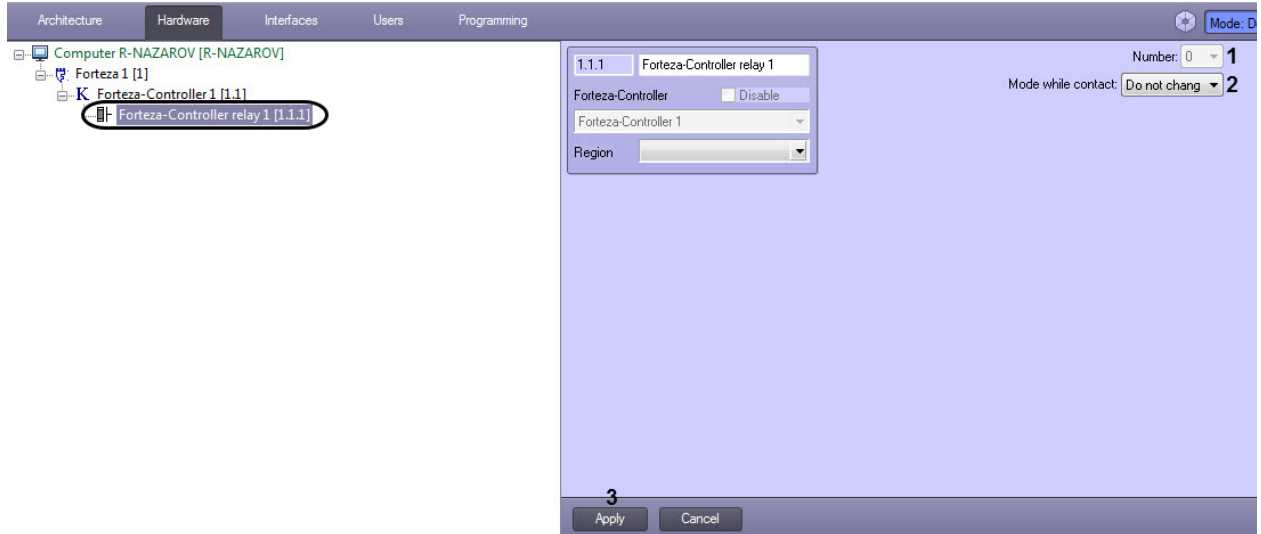
1. The **Address** field displays ID of COM port to which the controller is connected (1).
2. The **Type** field displays controller series (2).
3. The **Manufacturer code** field displays manufacturer's codename (3).
4. The **Serial number** field displays serial number of the controller (4).
5. The **Version** field displays controller firmware version (5).

Configuring Forteza-Controller relay

In *ACFA Intellect* the *Forteza-Controller relay* is configured on the settings panel of the **Forteza-Controller relay** object. This object is created under the **Forteza-Controller** object in the **Hardware** tab of the **System settings** dialog box.

Configure *Forteza-Controller relay* as follows:

1. Go to the settings panel of the **Forteza-Controller relay** object.



2. Field **Number** (1) can not be changed.
3. From the **Mode while contact**: drop-down list select the mode of relay operation (2):
 1. Do not change – mode of relay is not changed while connection to device.
 2. Enabled – relay is enabled while connection to device.
 3. Disabled – relay is disabled while connection to device.
4. To save changes click the **Apply** button (3).

Forteza-Controller relay is configured.

Working with Forteza PID integration module

General information about working with Forteza integration module

The following interface objects are used for working with *Forteza PSS* integration module:

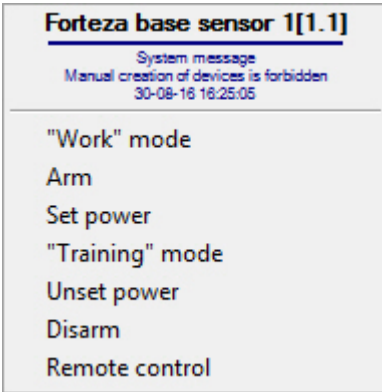
1. **Map**;
2. **Event Viewer**.

Information on how to configure these interface objects is given in details in [Intellect Software package: Administrator's Guide](#).

Information on how to work with interface objects is given in details in [Intellect Software package: Operator's Guide](#).

Controlling Forteza base sensor

Forteza base sensor is controlled in the **Map** interactive box using the function menu of the **Forteza base sensor** object.

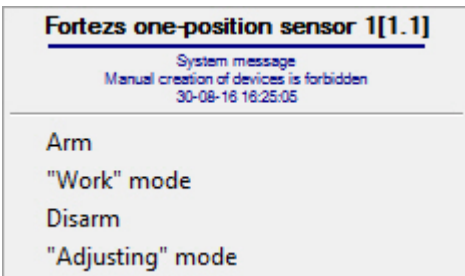


Find description of function menu commands of the **Forteza base sensor** objects in the table.

Function menu command	Executed function
"Work" mode	Switches sensor to the working mode
Arm	Arms sensor
Set power	Sets power to active element
"Training" mode	Switches sensor to the training mode
Unset power	Unsets power from active element
Disarm	Disarms sensor
Remote control	Enables remote control of sensor

Controlling Forteza one-position sensor

Forteza one-position sensor is controlled in the **Map** interactive box using the function menu of the **Forteza one-position sensor** object.



Find description of function menu commands of the **Forteza one-position sensor** objects in the table.

Function menu command	Executed function
Arm	Arms sensor
"Work" mode	Switches sensor to the working mode
Disarm	Disarms sensor
"Adjusting" mode	Switches sensor to the configuration mode

Controlling Forteza two-position sensor

Forteza two-position sensor is controlled in the **Map** interactive box using the function menu of the **Forteza two-position sensor** object.

Forteza two-position sensor 1[1.1]
Show last events
Duty mode
Handle alarms
Arm
MIR settings
Disarm
Threshold

Find description of function menu commands of the **Forteza one-position sensor** objects in the table.

Function menu command	Executed function
Duty mode	Switches sensor to the mode of threshold configuring
Handle alarms	Confirmation of alarm by Operator (the alarm displays on Map until confirmation)
Arm	Arms sensor
MIR settings	Opens a dialog box with commands available for MIR device
Disarm	Disarms sensor
Threshold	Sets operation threshold

Note.

The MIR device's mode can be changed only via the **MIR settings** command. The **Duty mode** and **Threshold** commands are not intended for the MIR device.





Functions available for the MIR device in the **MIR settings** dialog box are:



- Mode
- Penetration speed
- Threshold value

Forteza-Controller states

Forteza-Controller cannot be controlled in the **Map** interactive box.

The following *Forteza-Controller* states are possible:

Forteza-Controller 1[1.1] 	Alarm
Forteza-Controller 1[1.1] 	Starting operation alarm
Forteza-Controller 1[1.1] 	Remote control alarm
Forteza-Controller 1[1.1] 	Armed

Forteza-Controller 1[1.1] 	Disarmed
Forteza-Controller 1[1.1] 	No connection

Controlling Forteza-Controller relay

Forteza-Controller relay is controlled in the **Map** interactive box using the function menu of the **Forteza-Controller relay** object.

Forteza-Controller relay 1[1.1.1]
Show last events
ON
OFF

Find description of function menu commands of the **Forteza-Controller relay** objects in the table.

Function menu command	Executed function
On	Turns the relay on
Off	Turns the relay off

The following *Forteza-Controller relay* states are possible:

Forteza-Controller relay 1[1.1.1] 	Normal state
Forteza-Controller relay 1[1.1.1] 	No connection