Optex Integration Module Setup and User Guide

ACFA PSIM 1.0

Last update 09/01/2022

Table of Contents

1 List of Terms Used in Optex Integration Module Setup and User Guide

Axxon PSIM Server: a computer that has the **Server** installation version of the *Axxon PSIM* software package installed.

Perimeter Intrusion Detection System (PID): a software and hardware suite designed for controlling perimeter intrusions.

2 Introduction into Optex Integration Module Setup and User Guide

On the page:

2.1 Purpose and Structure of the Guide

The *Setup and User Guide for the Optex Integration Module* is a reference guide for users of the *Optex* software module, which is part of the perimeter intrusion detection system based on the *ACFA PSIM* software package.

This Guide contains:

1. information on the purpose of *ACFA PSIM* 's perimeter intrusion detection system;
2. general information on the *Optex* software module;
3. guidance on how to configure the *Optex* software module;
4. guidance on how to use the *Optex* software module.

2.2 General Information on the Optex Software Module

The *Optex* module is a component of *ACFA PSIM* 's perimeter intrusion detection system. This module is used for ensuring interaction between *ACFA PSIM* and the Optex perimeter security system (manufactured by OPTEX).

Note:

The detailed information on the Optex perimeter intrusion detection system can be found in the vendor documentation.

Before configuring the *Optex* software module:

1. Install the *Optex PID* hardware at the secure facility.
2. Connect Optex to the Server

3 Supported hardware and licensing of the Optex module

Manufacturer	OPTEX CO., LTD. Headquarters Public Relations TEL +81-77-579-8000FAX +81-77-579-7190
Integration type	Low-level protocol
Equipment connection	Ethernet

Supported equipment

Equipment	Function	Features
REDSCAN RLS-3060SH	Laser scan detector	• Coverage: 30 m, 180° • Unique detection algorithm • 4 independent detection areas • Automatic area setting function • Built-in heater • 4 independently linked outputs for PTZ camera control • Anti-masking and anti-rotation function • Tamper output • Vertical and horizontal mounting
RedBeam: RBM-60QN/100QN/200QN IP	Active 4-beam IR detectors for medium and long distances	• Power supply to detector using a PoE hub or switch • Double beam pulse synchronization • The high-grade aspherical lens creates a more sharply defined and precise active infrared beam • Weather system • Interruption time: 50 - 500 ms • Reliable operation when there is 99,5% beam energy loss • 15 kV discharge protection • Hermetic package that is insect-, dust-, freezing- and water-proof (IP-65) • Double-zoom viewfinder, easy-to-see vivid interior color for optical alignment

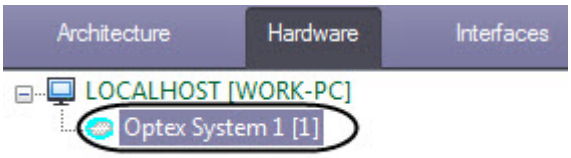
Equipment	Function	Features
Redwall PIE-1	IP converter	• Converting an analog signal from the N.C. detector output into digital format Redwall Event Code (UDP/ TCP) • When connected to a PoE switch, it can be used as a power source for detectors (24VDC, 800mA / 12VDC, 50mA) • Works with any Optex detectors or third-party detectors • 5 inputs of dry contacts (N.C.) • 2 x RJ-45 network outputs • PoE Support (IEEE802.3 af/at)

Protection
For 1 parent object

4 Configuring the Optex Integration Module

4.1 Activating the Optex Integration Module

To activate the *Optex* integration module, create an **Optex** object based on the **Computer** object located on the **Hardware** tab of the **Settings** dialog window.

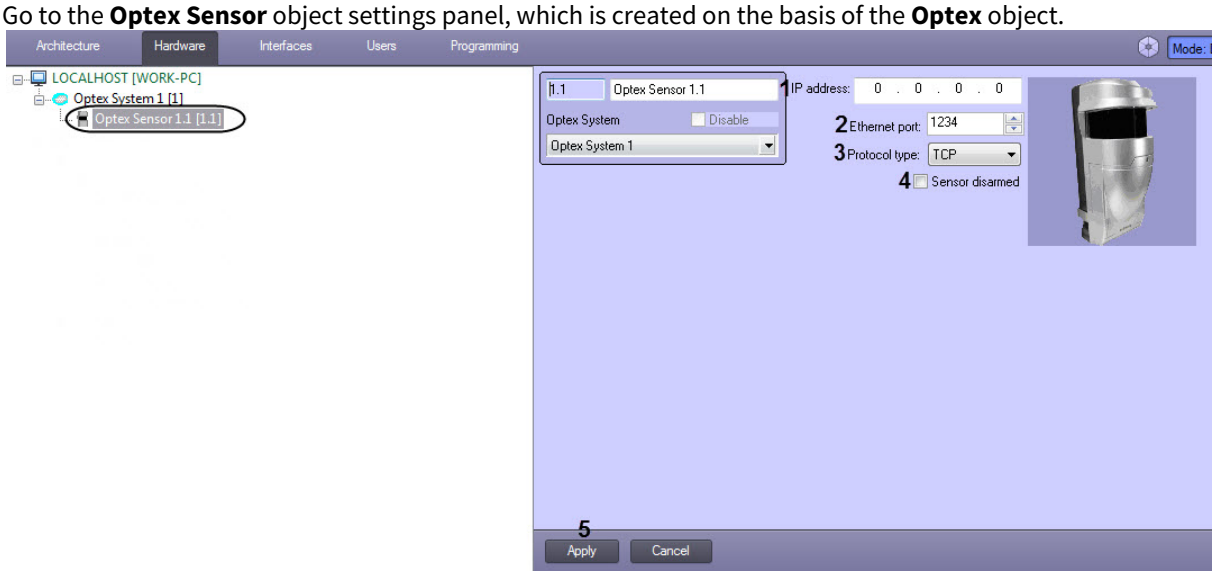


The *Optex* integration module is now activated.

4.2 Configuring the Optex Sensor

To configure the *Optex* Sensor, do the following:

1. Go to the **Optex Sensor** object settings panel, which is created on the basis of the **Optex** object.



2. In the **IP address** field, enter the sensor's IP address (**1**).

> **Note:**
>
> This IP address can be found in the vendor documentation.

3. In the **Ethernet port** field, enter the sensor's communication port (**2**).

> **Note:**
>
> By default, 1234 is used.

4. In the **Protocol type** drop-down list, select the communication protocol to be used to talk to the sensor (**TCP** or **UDP**) (**3**).

5. Set the **Sensor disarmed** check box (**4**) to automatically stop the alarm when the zone exits the **Alarm** state by hardware. Otherwise, the alarm will be active until the operator processes it.

> **Note**
>
> The alarm processing method is the same for all areas belonging to one sensor.

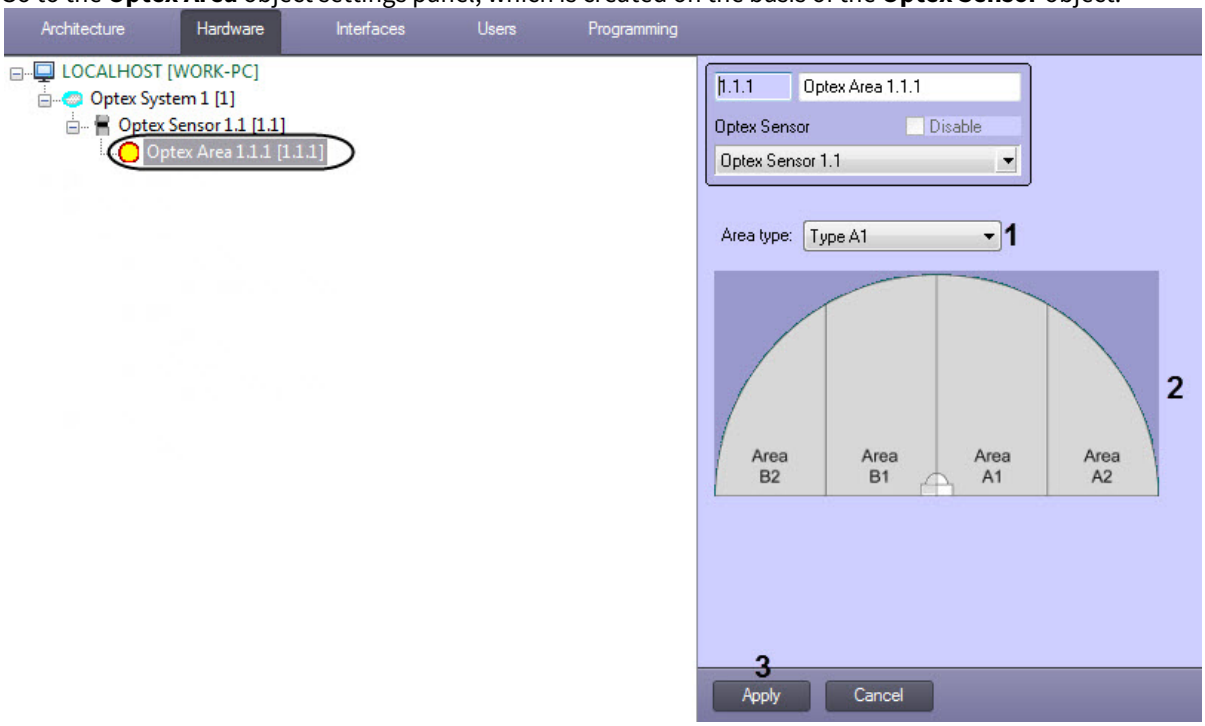
6. Click **Apply** to save the changes (**5**).

Optex Sensor is now configured.

4.3 Configuring the Optex Sensor area type

To configure the *Optex* Sensor area type, do the following:

1. Go to the **Optex Area** object settings panel, which is created on the basis of the **Optex Sensor** object.



2. In the **Area type** drop-down list (**1**), select the position of the *Optex* area fo the corresponding **Optex Area** object.

> **Note**
>
> The sensor areas are configured in hardware, the configuration process is described in the manufacturer's reference documentation.

> **Note:**
>
> The figure (**2**) shows the correspondence of the area names to their positions if the sensor is configured for 4 areas.

3. Click **Apply** to save the changes (**3**).

The *Optex* Sensor area type is now configured.

5 Using the Optex Integration Module

5.1 General Information on Using the Optex Integration Module

To use the *Optex* integration module, use the following GUI objects:

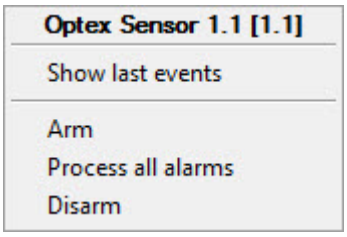
1. **Map**.
2. **Event log**.

The information on how to configure these GUI object can be found in the Axxon PSIM Software Package: Administrator's Guide.

The detailed information on how to work with the GUI objects can be found in the Axxon PSIM Software Package: Operator's Guide.

5.2 Managing the Optex Sensor

The *Optex* Sensor is managed in the **Map** interactive window using the **Optex Sensor** object functional menu:



The **Optex Sensor** object functional menu commands description is given in the table.

Menu command	**Function performed**
Arm	The sensor is armed
Process all alarms	The alarms from all the sensor's areas are processed
Disarm	The sensor is disarmed

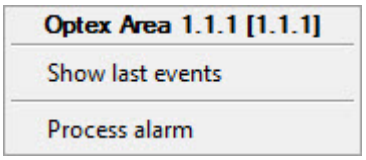
The *Optex* Sensor can have the following states:

Optex Sensor 1.1 [1.1] 	Disconnected
Optex Sensor 1.1 [1.1] 	Tampering

Optex Sensor 1.1 [1.1] 	Alarm in the area
Optex Sensor 1.1 [1.1] 	Alarm in the area (old)
Optex Sensor 1.1 [1.1] 	Dustiness
Optex Sensor 1.1 [1.1] 	Weather detection disabled
Optex Sensor 1.1 [1.1] 	Sensor failure
Optex Sensor 1.1 [1.1] 	Normal state
Optex Sensor 1.1 [1.1] 	Disarmed

5.3 Managing the Optex Area

The *Optex* Sensor area is managed in the **Map** interactive window using the **Optex Area** object functional menu:



The **Optex Area** object functional menu commands description is given in the table.

Menu command	**Function performed**
Process alarm	The alarm is processed

Note:

For a sensor, you can also process the alarms that come from all its areas (see Section Managing the Optex Sensor).

The *Optex* Sensor area can have the following states:

	Area disconnected
	Alarm in the area
	Alarm in the area (old)
	Disarmed
	Area in normal state