# Use cases libraries guide

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| ***Revision*** | ***Author*** | ***Date*** | ***Notes*** |
|---|---|---|---|
| v01 | N. Peli | 22/12/2025 | First version |
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| ***Revision*** | ***Approved by*** | ***Date*** |
|---|---|---|
| v01 | SafetySupport | |
| | | |

# 1. Description

This document provides a simple guide in order to understand and easily choose the TIA Portal's libraries that will better fit your needs.

## 1.1. Quicksetup LITE library

**SCOPE:** provides a fast set-up and commissioning of the Inxpect system with a basic set of functions.

**TO BE USED IN ONE OF THE FOLLOWING SITUATIONS:**

- Single area to be monitored for presence sensing (Restart Prevention) and one control unit;
- Single area to be monitored and more control units. (All the sensors in use belongs to that area).

The key point is that there aren't sensors belonging to the same control unit but monitoring different independent areas.

The library provides the signal that the monitored area is free. Aside this allows it to perform many other basic commands, like muting, System recondition, anti tampering reference overwriting.

## 1.2. Quicksetup library

**SCOPE:** the same as Quicksetup LITE but with additional functionalities. For instance with this library you can choose which sensors of a control unit are assigned to the presence sensing function and which ones are assigned to the access detection function.

**TO BE USED IN ONE OF THE FOLLOWING SITUATIONS:**

- Single area/machinery to be monitored for presence sensing and/or access detection and one control unit;
- Single area to be monitored and more control units. (All the sensors in use belong to that area).

The key point is that there aren't sensors belonging to the same control unit but monitoring different independent areas.

The library provides the signal that the monitored area is free.

The library can also provide the signal if the monitored machinery must be stopped or slowed down.

Aside this it allows to perform many other basic commands,like:

- muting and unmuting sensors;
- choose if the muting operation should be done manually or automatically;
- choose the sensors (linked to a control unit) to be used as restart prevention and which ones to be used for access detection;
- reset tampering alarms (masking, sensor rotation).

## 1.3. Restart Prevention Multiple Areas library

**SCOPE:** provides a fast set-up and commissioning of the Inxpect system when you have multiple areas to be monitored and multiple control units.

The key point is that one control unit could have some sensors belonging to one area and other sensors belonging to a different area. The library is able to provide the status of each single sensor.

**TO BE USED IN ONE OF THE FOLLOWING SITUATIONS:**

- The sensors of one control unit can be assigned to different independent areas;
- The user wants to have the status of each single sensor, for instance to show it on the HMI.

Aside this it allows  to perform many other basic commands,like:

- muting and unmuting sensors;
- choose which sensors assign to one specific area and which ones to assign to a different area, independently by the control unit;
- Reset tampering alarms and perform a system recondition (masking, sensor rotation);

- Check the diagnostic status of each control unit;

- Check the status of each sensor.

## 1.4. Dynamic Configuration Call library

**SCOPE:** provides a fast and easy way to change the active dynamic configuration.

**WHEN TO USE IT:** to be used in order to change the active dynamic configuration.

It allows you to recall up to 32 different configurations if the system supports this feature.

## 1.5. Error Codes library

**SCOPE:** provides a fast way to easily get the errors coming from the Inxpect hardware (Control unit, Sensors 100 series and sensors 200 series).

**WHEN TO USE IT:** to use when you want to have the diagnostic error information from Inxpect Hardware. There are three already prepared Function Block (one for each Inxpect's hardware type) that, when an error occurs, provides the information of the error in three different formats (HMI Alarm view, Hexadecimal code and textual description).

Can be combined, for an effective fast development of the application, with objects coming from "Faceplates library" we will discuss later in this document.

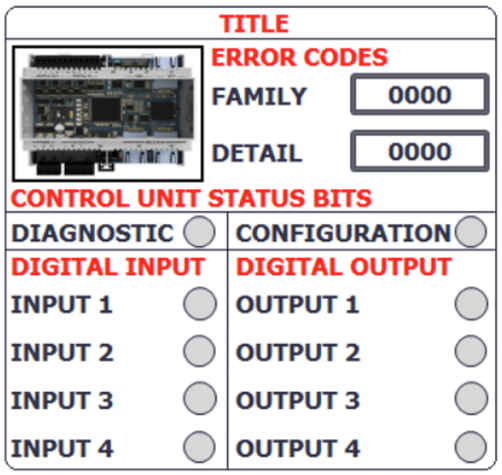
## 1.6. Faceplates library

**SCOPE:** provides already made faceplates for fast HMI development.

**WHEN TO USE IT:** to use for fast HMI development.

The available faceplates are:

- **CU_Faceplate**. It provides basic status information of the control unit along with the error information;
- **Sensor_Faceplate**. It provides basic status information of a specific sensor along with the error information;
- **ErrorPanel_Faceplate**. It provides information about error codes in different formats: HMI alarm view, hexadecimal codes and textual descriptions. This faceplate has been made to be used for each Inxpect hardware (Control unit, Sensors from 100 series and sensors from 200 series).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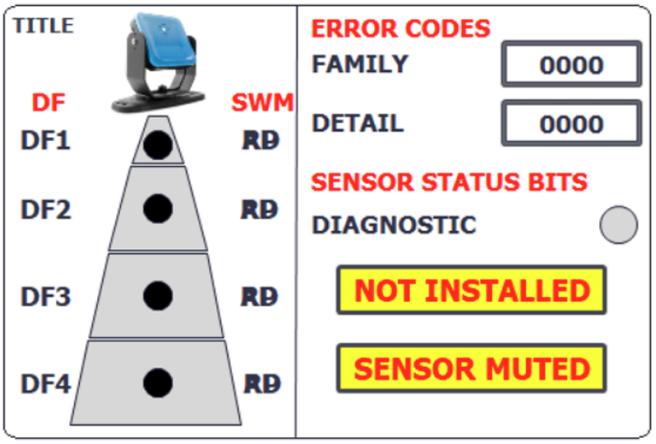
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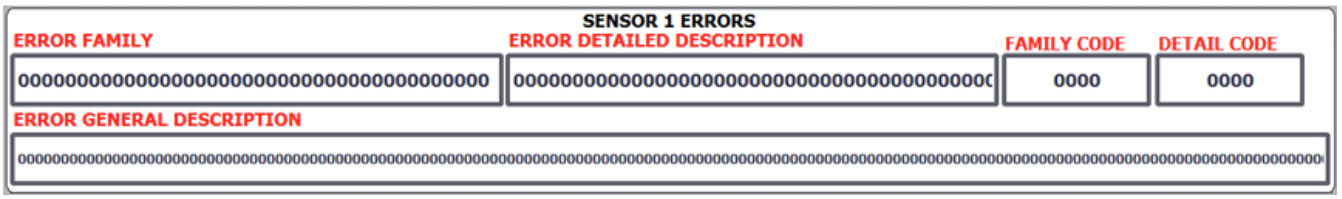
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