

PROCESS INSTRUMENTATION

SITRANS Library–PCS 7 optimize your process

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Process control library and faceplates for SITRANS field devices

In a plant full of modern, intelligent field devices, how do operators ensure ease of use in the control system when instrument functionality isn't always uniform?



Through the SITRANS Library, automation solutions with SIMATIC systems and field devices from the SITRANS and SIPART families become easier, better optimized and more economical—by using functions that are already built into the devices.

Platform-spanning for SIMATIC PCS 7 for HART, PROFIBUS and PROFINET devices

With a look and feel based on the APL standard of SIMATIC PCS 7, SITRANS Library offers a uniform view of all target systems. When used in distributed, hierarchical plants, centrally adjustable access control is supported at all levels this means the SITRANS Library seamlessly complements the standard library (APL) and the industrial library of SIMATIC PCS 7.

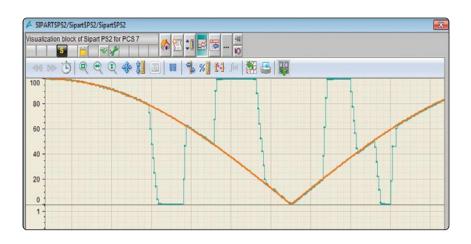
For additional information of the supported system versions:

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Free download of the SITRANS Library!

| Visualization block of S | ipart PS2 for PCS 7 | <u>8</u> :12 | ··· · | |
|--------------------------|---------------------|--------------|----------|--|
| | Mode | Manual | | |
| | Command | Open | | |
| | Manipulated var. | Internal | | |
| | 4 | Rese | Resel | |
| | 7 | E | 100,0 | |
| Limit Violation | Manipulated var. | 100,0 % | | |
| Limit violation | Readback value 🦨 | 0,0% | | |
| Move to lower Lim | | | 0,0 | |
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Gain greater transparency about the status of a control valve through display of set point and process value in a single faceplate.

Highlights of the SITRANS Library

Valve positioner SIPART PS2

- One click opening and closing of valves by the plant operator
- Easy switchover from "Automatic" to "Manual"
- Manual specification of the manipulated variable
- Visualization of all binary input and output states in the faceplate (add-on modules for the SIPART PS2, e.g. alarm modules)
- Greater transparency for control characteristics
- Shared display of manipulated variable and position feedback as trends in a single chart

For SIPART PS2, users have access to all information in a single faceplate—this means a clear overview of all relevant information (set point, process value, information of the add-on modules, e.g. alarm module). The deviations between manipulated variable and position feedback displayed in the trend are therefore immediately visible to the plant operator. "Move to lower limit" or "Move to upper limit" was triggered by switching one of the respective binary inputs on the positioner.



SITRANS pressure and SITRANS temperature devices

The synchronization of limits and units ensures consistency between the display in SIMATIC PCS 7 and the field device, resulting in increased reliability.

- Visualization of the HART auxiliary variables in the same faceplate considerably simplifies monitoring and operator control
- Easy determination of minimum and maximum values in a specific period through visualization of the peak values
- Increased reliability of the plant through long-term monitoring (check whether process values were always in the permitted range)
- · Helps to detect high energy consumption and optimizes plant performance
- There is also the option to use the SITRANS P DS III pressure transmitter for flow measurement and display the measured values clearly in a single faceplate

SITRANS level radar devices

All process values are also displayed clearly in a single faceplate during level measurement.

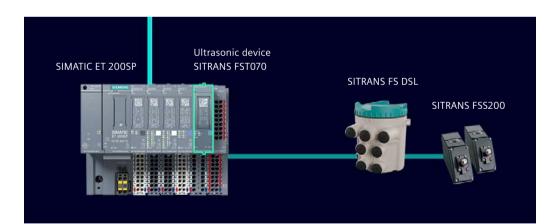
- Simple display if the tank is being filled or drained, showing how much longer the process will take until any given limits are reached
- Operator receives additional information to facilitate process control without need for additional measurements or comprehensive calculations and operator intervention

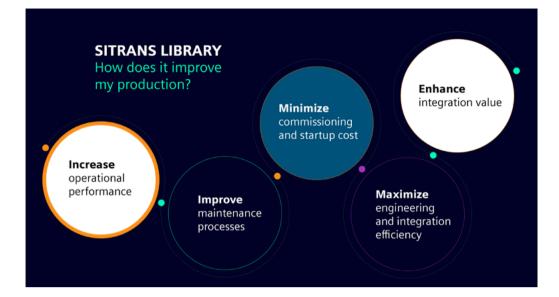


SITRANS flow measurement devices

Users have direct access to the SITRANS FST070 clamp-on ultrasonic flow meter module within the faceplates.

- Set up the sensor type connected
- Configure process variables
- Access all three available totalizers
- Use advanced diagnostic features including path diagnoses







Free download of the SITRANS Library!

Did you know?

You can download the SITRANS Library free of charge and without a license.

The SITRANS Library...

Provides function blocks and faceplates for optimum use of SITRANS field device functions in SIMATIC-based applications.

Helps simplify the engineering process, optimize process control and is the perfect addition to the Advanced Process Library.

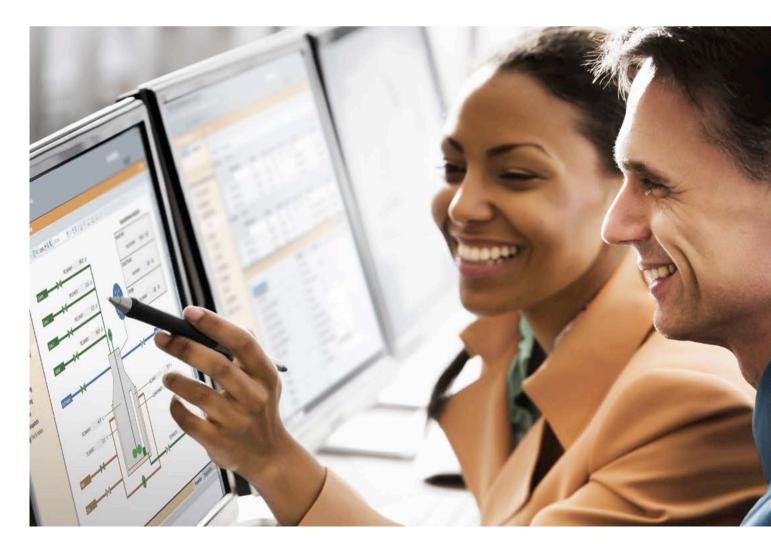
Supports users in operations management by compiling function-related and device-related information in a single faceplate.

Increases availability, transparency and reliability of the plant.

Enables reading the unit and limits of the respective measured variable from the device. Synchronization of the units and limits in SIMATIC PCS 7 and the field device increases security and availability while reducing engineering and commissioning overhead. Basic errors, such as "mbar" in the device and "bar" in the control system, are prevented with the SITRANS Library function.

Intelligent engineering and optimized process control

- Use of functions and data that were hard to access in the past through device-specific function blocks / block icons / faceplates
- Use of process control functions of SIMATIC PCS 7 in engineering and operation
- SIMATIC PCS 7 APL-compliant
- Consistent look and feel, plus additional useful information for the operator
- Greater transparency for the plant
- Supports the multiple-plant concept for hierarchically distributed plants





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