



The background image shows a blurred industrial setting with a futuristic digital overlay. The overlay consists of glowing blue lines and wireframe models of industrial structures, including buildings, pipes, and storage tanks. A person in a dark suit is visible on the right, holding a tablet. The tablet screen displays a dashboard with various charts and graphs, including a bar chart, a line graph, and a pie chart, all with green and blue color schemes. The overall theme is digital transformation in industry.

Siemens Digital Industries Webinari

PI1: PI Academy world


Siemens Digital Industries Webinari 1/2



Datum	Tema	Predavač
14.04. / 19.05.	FA1: Motion Control	<i>Darko Živković, Jelena Đukić</i>
15.04. / 14.05.	FA2: Energy Management System	<i>Zoran Jovanović</i>
22.04. / 21.05.	FA3: Redundantni kontroleri serije S7-1500R/H	<i>Mirko Milovanović</i>
05.05. / 26.05.	FA4: WinCC Unified	<i>Mirko Milovanović</i>
15.04. / 13.05.	MC1: DT konfigurator	<i>Nenad Bakal, Pavle Dragišić</i>
23.04. / 22.05.	MC2: Sizer, large drives	<i>Miloš Marković, Pavle Dragišić</i>
06.05. / 26.05.	MC3: Sizer, motion drives	<i>Miloš Marković, Pavle Dragišić</i>
21.04. / 21.05.	CI1: Industrial Networks	<i>Jelena Đukić</i>

Siemens Digital Industries Webinari 2/2



Datum	Tema	Predavač
 16.04. / 15.05.	PI1: PI Academy world	Andrijana Popara, Miljan Miljanić, Marko Marić
24.04. / 22.05.	PI2: PI workshop for specialist	Andrijana Popara, Miljan Miljanić, Marko Marić
08.05. / 29.05.	PI3: #New@PI	Andrijana Popara, Miljan Miljanić, Marko Marić
30.04. / 29.05.	AE1: Digitalna rešenja u procesnoj industriji	Jelena Đukić, Marko Milenković
29.04.	CP1: Control Panel Online Symposium	Siemens worldwide webinar
22.04. / 27.05.	CP2: Clever engineering in the control panel	Tijana Džodžo
28.04. / 12.05.	CP3: New series of signaling devices 3SU	Tijana Džodžo
21.04. / 20.05.	CP4: SIRIUS 3RW Soft starters	Bojan Janković
07.05. / 28.05.	DE1: Siemens Digital Enterprise	Zoran Jovanović

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SIEMENS Apps for Process Industries

Engineering

Engineering



Ensure Asset Uptime

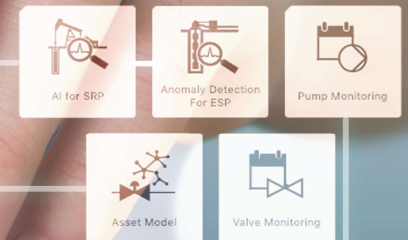
DCS



Instrumentation



Valves & Pumps



Drives & Turbines

PI Academy world

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Predavači



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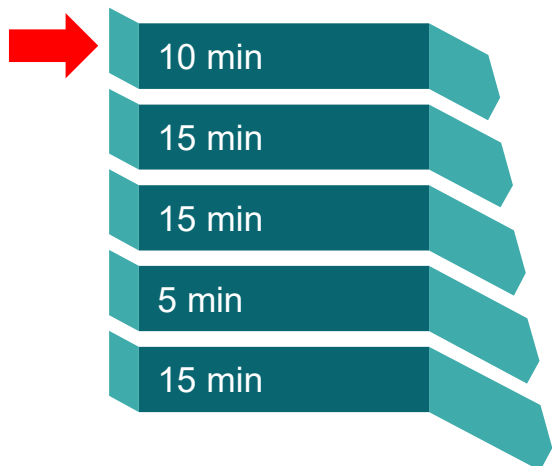
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Agenda



Teme

Portfolio procesne instrumentacije

PIA portal

Alati za proračun merno regulacione opreme

Digitalizacija i procesna oprema

Zaključci, komentari, pitanja

Predavač

Miljan Miljanić

Marko Marić

Andrijana Popara

Miljan Miljanić

Our broad portfolio covers all customer needs.
Your single-source-supplier.

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 **Flow** Electromagnetic, Coriolis, Ultrasonic & Vortex

 **Temperature** Rail, Field, Head, Sensor, Multipoint


 **Positioner**



 **Level** Capacitance, Radar and Guided wave radar, Ultrasonic

 **Pressure**

 **Weighing**

 **Software** SITRANS Library, SIMATIC POM

FI01



WT10



MP20



Pressure measurement without ifs and buts: SITRANS P

SITRANS P is a complete range of measurement instruments for measuring relative pressure, differential pressure and absolute pressure. In addition to high measuring accuracy and ruggedness, the modular system features superb operating convenience and functionality as well as a perfect safety concept.



SITRANS P500 – Digital transmitter for high-precision applications with unparalleled specifications for overall performance and long-term stability

- Deviations from the characteristic curve of less than 0.03% of the calibrated measuring range for different pressure and level requirements
- Design of the measuring cells allows for use with media temperatures of up to 125 °C even without the use of a remote seal system
- Good step response time (T63) of only 80 ms ensures plant safety in critical applications
- Device configuration via standard HART® protocol-compatible tools or directly on-site with local operation and LCD display
- Graphics-enabled display shows curve and trend diagrams for goal-oriented process monitoring



Benefits at a glance

- All applications supported thanks to a highly diverse portfolio
- Meet all current explosion protection requirements
- High product variance thanks to standard options and customizations
- A variety of materials and process connection options available, including stainless-steel enclosure versions
- Expanded diagnostics
- Maintenance benefits

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Next Generation Pressure Device

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SITRANS P320/420

Display

- 3 display lines
- Perfect readable
- Diagnostic Icons (NE107)
- Specific error number in the Bottom Line

Measuring Ranges

- Pressure Transmitter:
250 mbar to 700 bar
- Differential Pressure Transmitter:
20 mbar to 30 bar
- Absolute Pressure Transmitter:
250 mbar to 100 bar



P420: Step Response Time

- $T_{63} < 105 \text{ ms}$ for Pressure
- $T_{63} < 135 \text{ ms}$ for Dp Pressure

Error

Linear Characteristic:

- P320 0,065%
- P420 0,04%

Temperature Error

$(0.0125 \times r + 0.0625)\% / 28\text{K}$

Effect of Static Pressure

- $\text{PKN} = (0.1 \times r) \% / 70\text{bar}$
- $\text{PKS} = 0.1\% / 70\text{bar}$

Robustness

Housing Material:

- Aluminium
- Stainless Steel 316L

The easy way to handle dP-Flow measurement

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Feature/Function

Large variety of different designs and materials

Compact or remote version

Complete flow solution

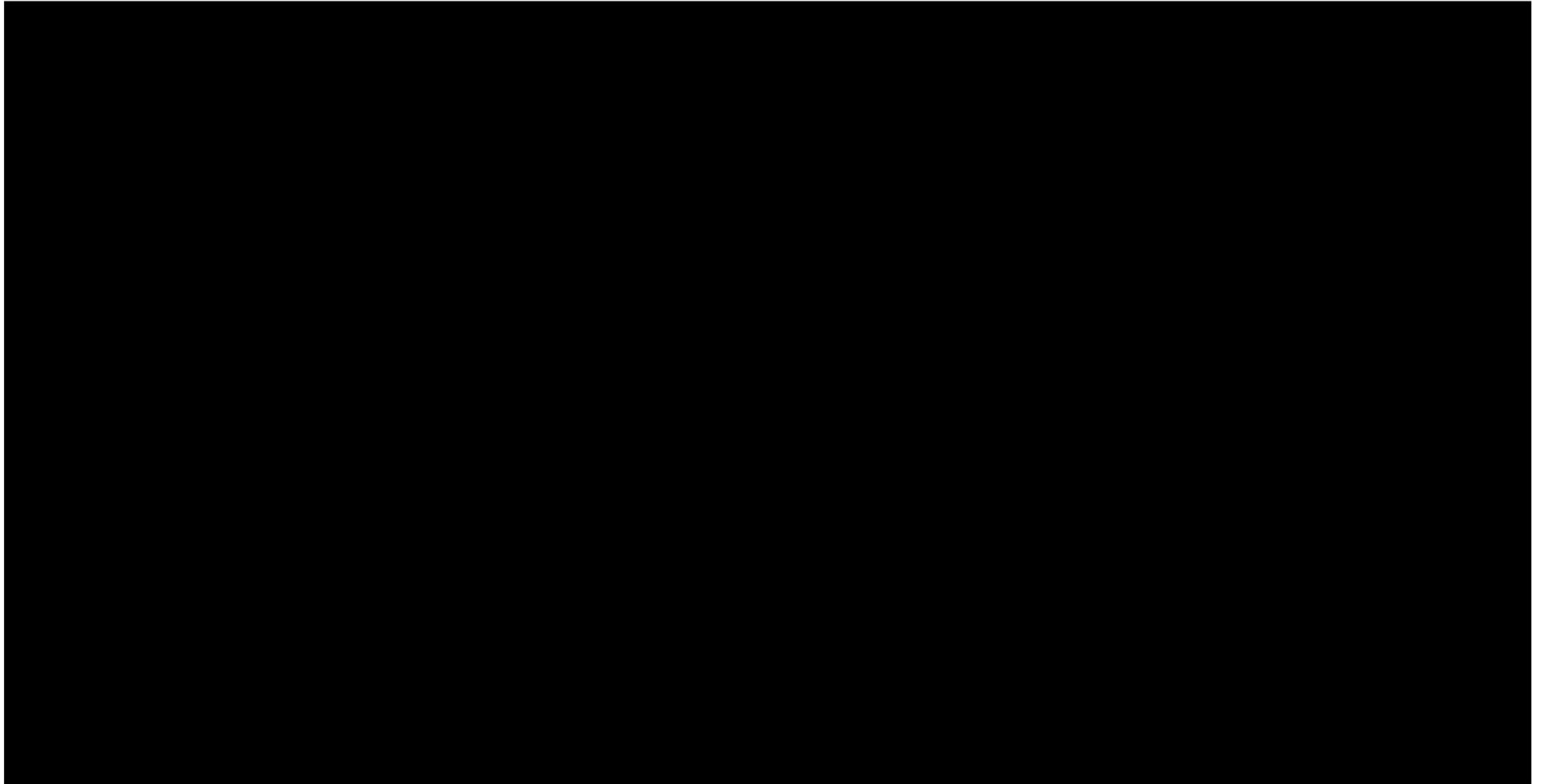
Advanced sizing tool

Benefit

- Suitable for a vast range of different applications
- Suitable for various process conditions and parameters
- Flexible mounting
- One pressure transmitter for all applications
- Single source supplier for the hole measuring point
- Pre-mounted flowmeter delivered in “one box”
- Easy traceability throughout the ordering process
- Direct technical feedback and possibility to order

And now it's coming something new

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SITRANS FM100

The small and compact addition to the SITRANS F portfolio

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SITRANS FM Portfolio

When it comes to boosting productivity, choosing the right flowmeter can make all the difference. The trusted SITRANS F product family has versatile and reliable flow measurement solutions built to suit every industry and process.



The **SITRANS FM100** is a great addition to our existing portfolio and will boost the versatility even more.

This product aims to enlarge the flow portfolio for **OEM customer** and **other applications** requiring small meters.

Because every degree matters: SITRANS T

SITRANS T products are the temperature measurement professionals, even in extreme conditions. Whether used in hot, cold or hazardous environments – the communicative SITRANS T meets all expectations. And whether you're looking for sensors or transmitters for head, rail or field mounting – all are available individually or as complete measuring points. Our cost-effective SITRANS T transmitters offer high precision in every application and are quick and easy to connect to thermocouples or resistance thermometers. The SIMATIC PDM intelligent software package permits parameterization in just minutes, and input errors are avoided.



SITRANS T5500 – Temperature sensors for pipes and vessels – from simple applications to solutions for harsh environments

- Modular system with thermowell made of tubular or barstock material, extension, connection head, and optional transmitter or display
- Version for intrinsic safety. Flameproof and nonpiping are available



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The recent portfolio will be updated by a new generation of T-Transmitters

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Head transmitters

Old portfolio

TH100 4...20mA

TH200 4...20mA

TH300 HART

TH400 PA/FF

New portfolio

TH100 (4-20mA)

TH 320 Single Channel
4-20mA version
HART version **NEW**

TH 420 Dual Channel
HART version **NEW**

TH400 (PA/FF)

New common features

- 4-wire RTD
- SIL 2/3 IEC 61508
- -50°C ambient temperature
- Ex and Marine approvals,
- Calendar van Dusen
- TH with HMI interface

Rail transmitters

TR200 4...20mA

TR300 HART

TR 320 Single Channel
4-20mA version
HART version **NEW**

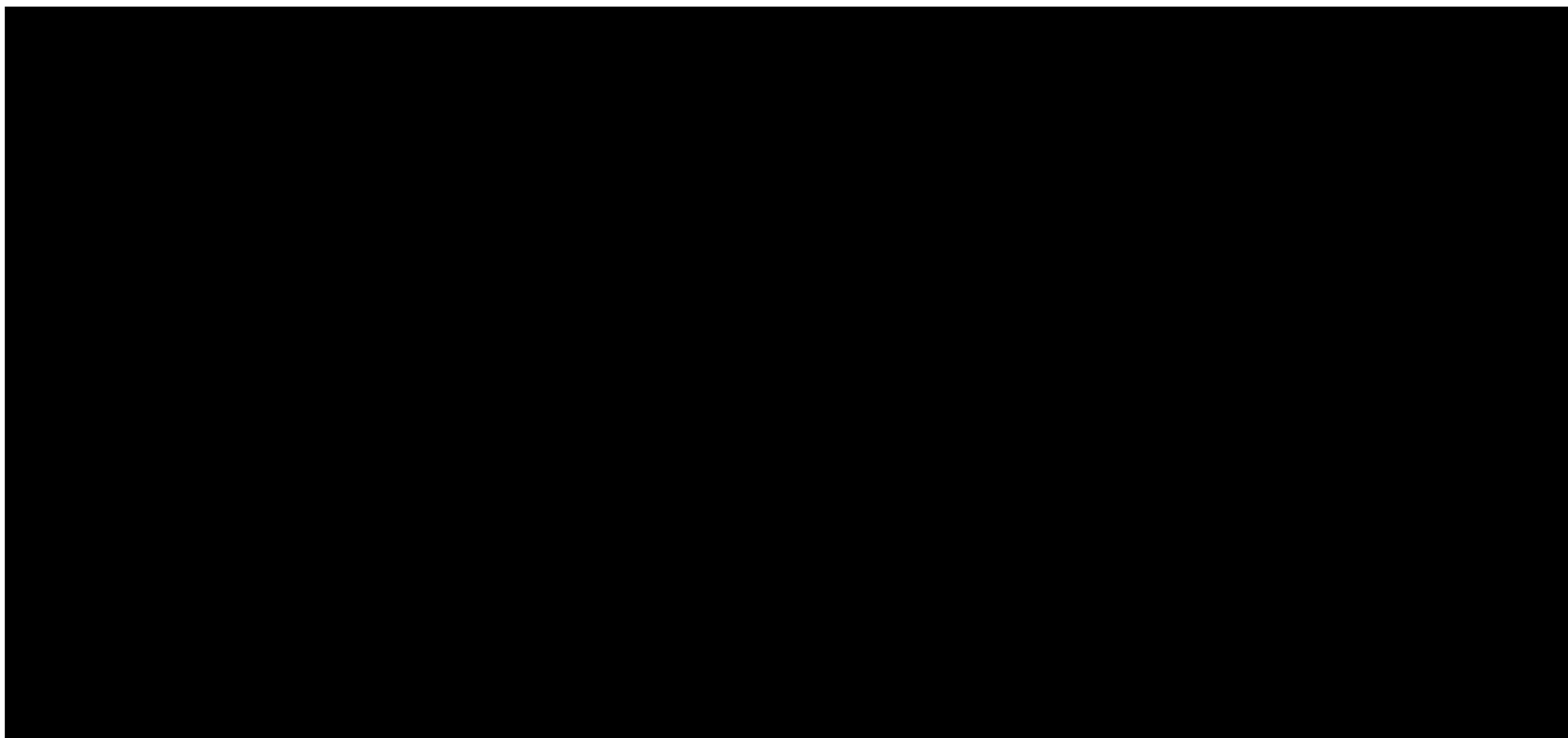
TR 420 Dual Channel
HART version **NEW**

Additional features for dual input version (TH/TR 420)

- Hot backup
- Drift detection and monitoring
- Mixed operation TC and RTD

Join the evolution in level measurement.

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SITRANS LR100 series

Level measurement for basic inventory in general industries

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Feature/Function

Bluetooth wireless technology with SITRANS mobile IQ app on your mobile device

2 mm accuracy (LR110/120 versions) and zero blanking distance

Custom radar microchip delivers exceptional sensitivity

80 GHz yields narrow beam

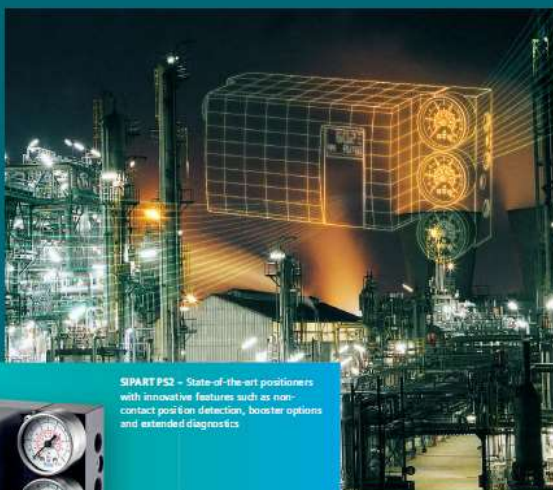
Digitalization ready with 2-wire HART 7.0 or 4-wire Modbus RTU

Benefit

- Time-saving and no specialists required
- Device status at a glance
- Precise measurement over entire range, accurate volume measurement.
- Signal killer conditions like condensation, turbulence, buildup or fluffy solids are no problem.
- No nozzle interference, no costly fine-tuning.
- Get status and diagnostic data immediately to your systems ensuring quality of your process and faster and intelligent data for operations

The diagnosis: first class

They ensure safe and trouble-free procedures in a wide variety of process industries around the world: positioners precisely control the entire range of valves and master even special tasks with absolute reliability. At the same time, we have continued to expand our proven range of products throughout the years – always based on your needs.



SIPART PS2 – State-of-the-art positioners with innovative features such as non-contact position detection, booster options and extended diagnostics

Compact positioners

SIPART PS100 in polycarbonate or aluminum enclosure




SIPART PS2 in polycarbonate, aluminum, or stainless-steel enclosure




SIPART PS2 (Ex d) in flameproof aluminum or 316L stainless-steel enclosure

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Weighing Technology

Weighing your world

Dynamic and static instrumentation solutions.

siemens.com/weighing




Bridge design ensures proper alignment of load cells during installation

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Solution
Partner

Automation

SIEMENS

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UNITED FOR WATER QUALITY



Electrochemical
Parameter



Nutrients



Solids



Sum Parameters



Chlorine



Controller



Sampler



- pH
- conductivity
- oxygen
- ammonium
- phosphate
- nitrate
- solids
- turbidity
- sludge level
- oil
- TOC
- chlorine
- sampler....

Configure any Siemens PI product conveniently with a single click Siemens Lifecycle Portal

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Product, application, industry selection and configuration



Product data and application know-how



Save and administrate projects online



Equipment and spare parts



**Scan to
explore
the PIA
Lifecycle
Portal**



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PIA Life Cycle Portal Intra

The tool for Engineering, Ordering,
Installation and Operation for Process
Instrumentation and Analytics

Automation technology

► Language

► Contact

► Help

Search

► Home ► Engineering ► Selection

Select the right step in the Product Life Cycle

→ Engineering

→ Ordering

→ Installation & Operation

Selection

Configuration

Sizing

Guided selection



Achieve product solutions that
meet your requirements by
specifying relevant parameters
according to the measuring
problem

► Selection by Technology

► Selection by Application

► Selection by Industry

Product tree



Hierarchical product selection for
process instrumentation, process
analytics and weighing and
batching systems.

► start

Accessories



Find appropriate accessories for
selected products

► start

(0) watch list

(0) latest search result

Font size

Product number

go

Product family

Please select a product

go

Serial number

go

PIA Mobile



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► <http://siemens.com/piamobile>

Internet Access

Customers view

► <https://www.pia-portal.automation.siemens.com>

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► Home ► Engineering ► Configuration

Select the right step in the Product Life Cycle

→ Engineering

→ Ordering

→ Installation & Operation

Selection

Configuration

Sizing

Configure a product or verify an order number



Configure a selected product step
by step and use the integrated
configuration knowledge to avoid
errors.

Start configuration

The product number can be entered as follows:
Entry of a basic product number: e.g. **7MF4433**

Entry of a complete configured product number, as well
inclusive options:
e.g. **7MF44331BA021BA6-Z A02**

Entry of a partial configured product number: e.g.
7MF4433.B.21BA6
- wild-card for unspecified digits: dot (.)

Entry of a partial qualified product number: e.g. **7MF4***
- wild-card for unspecified digits: asterisk (*)
- consisting of at least four digits.

Number converter



Convert part numbers of:
- competitors products
- older Siemens products
into an part number of a valid
Siemens product or a product
with comparable technical

specifications

► start

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Product number

Product family

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Select the right step in the Product Life Cycle

[Engineering](#) | [Ordering](#) | [Installation & Operation](#)

[Selection](#) | [Configuration](#) | [Sizing](#)

Sizing & Calculation



Sizing & calculation tools for Gas Analyzers, Weighing and Batching Systems and Flow measurement instruments.
[start](#)

(0) watch list

Font size

Product number

Product family

Please select a product

Serial number

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[Home](#) > [Engineering](#) > [Sizing](#)

Sizing & Calculation

Process Instrumentation




[Weighing and Batching Systems](#)




[Flow](#)

Process Analytics



[Process Analytics](#)

Flow



[SITRANS FC430 sizing](#)
[SITRANS F sizing](#)
[SITRANS F II sizing](#)
[SITRANS F II chemical resistance chart](#)
[SITRANS F C sizing](#)
[SITRANS F US clamp-on number conversion](#)
[SITRANS F X sizing](#)
[SITRANS F O sizing](#)
[SITRANS F O questionnaire](#)

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Product family

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Instrumentation and Analytics

Automation technology

► Language

► Contact

► Help

Search

► Home ► Ordering

Select the right step in the Product Life Cycle

→ Engineering

→ **Ordering**

→ Installation & Operation

Watch list & Projects



Collect products in a Watch list
and use functions to:
- print out
- download
- transfer to Industry Mall

Save your watch list as a project for later use.

► (0) watch list

► My Projects (Please log in)

Bulk upload



Verify several part numbers at
the same time by uploading a
simple text file into your watch
list or project.

► start

Industry Mall



The order system for Automation
and Drive Technologies by
Siemens.

► [Go to Industry Mall](#)

(0) watch list

(0) latest search result

Font size

Product number

go

Product family: Process Instrumentation

Please select a product go

Product family: Process Analytics

Please select a product go

Serial number

go

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Instrumentation and Analytics

Automation technology

Language

Contact

Help

Search

> Home > Installation & Operation

Select the right step in the Product Life Cycle

→ Engineering

→ Ordering

→ **Installation & Operation**

Spare parts



Spare parts
> start

Device information and history



Serial number specific product
information for installed devices.

S/N: N1R10

Example:

N1R1029397047, N1A2049126062

> start

Support



Anything concerning support:
> FAQs
> Manuals
> Downloads (e.g. EDD)
> Certificates / Approvals

> Go to Support Portal

Service



Anything concerning service:
> Factory Services
> On-site Services
> Services by Technology
> General services

> Go to Service Catalog

(0) watch list

(0) latest search result

Font size

Product number

go

Product family: Process Instrumentation

Please select a product go

Product family: Process Analytics

Please select a product go

Serial number

go

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Alati za proračun

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Automation technology ▶ Language ▶ Contact ▶ Help


> Home > Engineering > Sizing


Sizing & Calculation

Process Instrumentation


 > Flow

 > Positioner

 > Pressure

 > Temperature

Flow



[SITRANS FC & FM sizer \(download\)](#)

[SITRANS F M sizing](#)

[SITRANS F M chemical resistance chart](#)

[SITRANS F US clamp-on number conversion](#)

[SITRANS F X sizing](#)

[SITRANS F O questionnaire](#)



SFI Vortex Sizing
Desktop app

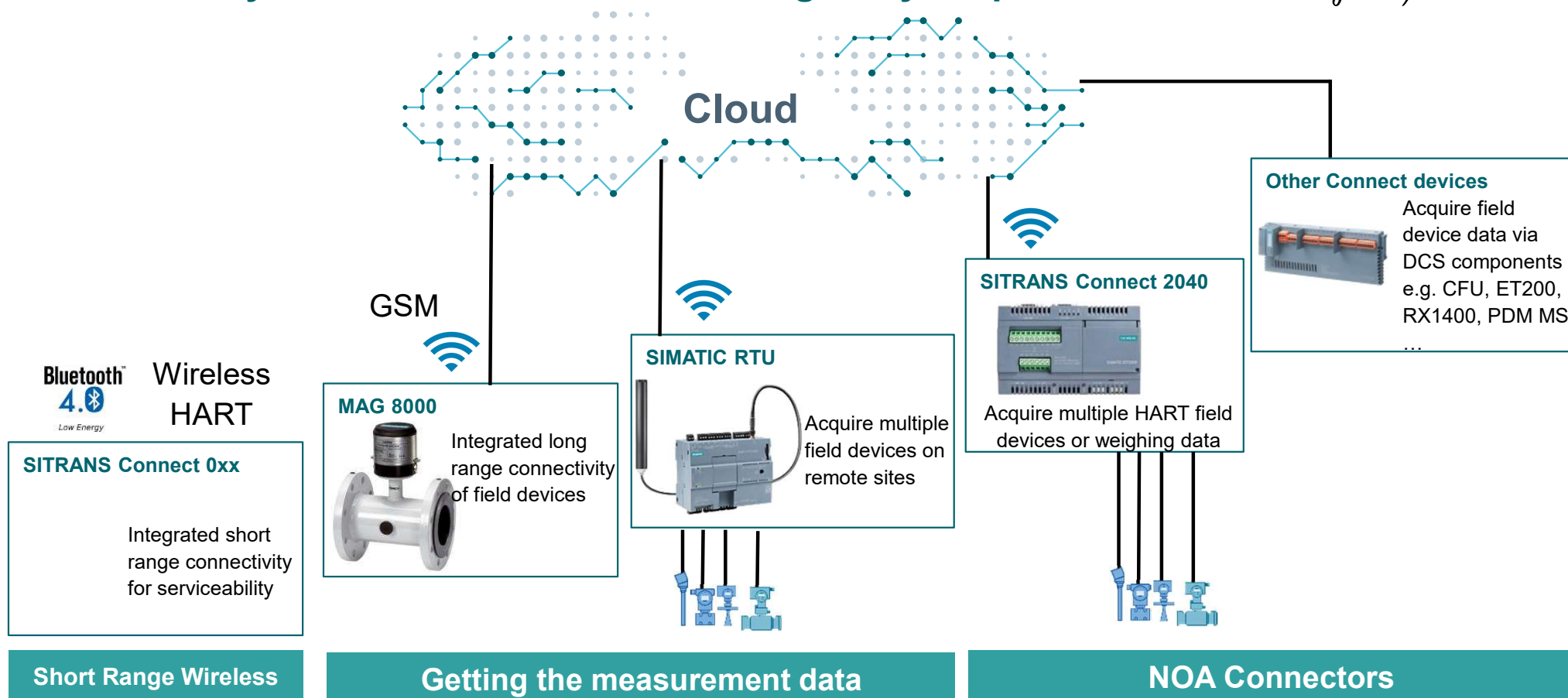


**Siemens
Process
Instrumentation
on Product
Sizing**

SITRANS Connect – preview

Connectivity on all automation levels to digitize your plant

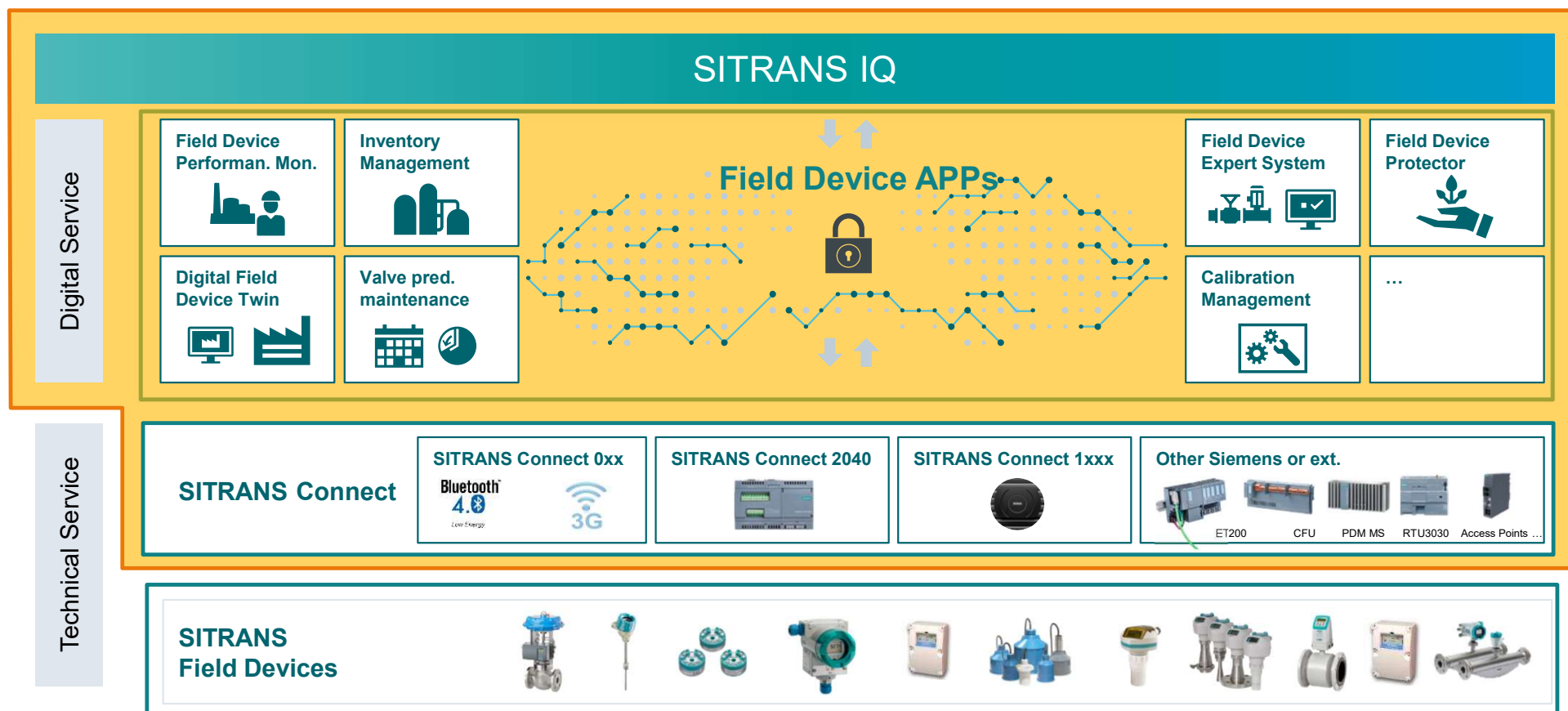
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SITRANS IQ – Our digital field device platform for performance, efficiency and reduced downtime across the life cycle

call for pilots

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Support as 24/7 online services or online call-back services to ensure uptime of your assets.

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Online Service Support (SIOS)



Every single day,
around the clock

- Free web service portal
- Information about products, systems and services
- Direct access to additional services and contact partners

Support Request

siemens.com/industry/supportrequest

Services
tailored for
your
success ✓

1 Select a product

2 Select an application case

3 Our solutions

Product/Order number *

Please enter a product **without a version specification**
(e.g. TIA Portal, STEP 7, S7-1500, PCS 7, ET 200SP, SIMOTION Scout, ...)

Search

* = Mandatory field

Industry Online Support Großbritannien

Contact Help Support Request

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- Product Support
- Application Examples
- Services
- Forum
- MySupport

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Register today

Use the full range of functions of Industry Online Support as a registered user – easy and free of charge.

- Your advantages
- Free registration

Searching for product information

This is how you get quick and easy current information from our global support database. Simply enter your specific product information.

Product/Article No.

You are looking for

- FAQs
- Manuals
- Downloads
- Application Examples
- Important issues at a glance

You would like to

- be notified in the case of product changes
- find a contact partner near you
- send a support request
- have a discussion with other users in the forum
- Compatibility statements on automation and drive technology

Our service offer

We offer numerous services around our products and systems that support you in every phase of the lifecycle of your machine or plant – from planning and realization to commissioning, right up to maintenance and modernization.

Details can be found in the service catalog in:

- Plant Data Services
- Training Services
- Support & Consulting Services
- Spare Part Services
- Repair Services
- Field & Maintenance Services
- Retrofit & Modernization Services
- Service Programs & Agreements
- Material-Specific Services



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Simplify your life

The source for your complete integration from sensor to cloud



Conquer harsh and tough conditions

Engineered to perform in your most difficult applications

Evolve your business

Digitalization brings the critical field data where it is needed, unlocking hidden and unknown opportunities



Protect your investments

People, processes, equipment and business. Certifications like SIL, internal monitoring and remote testing provides peace of mind.



Engineered for process industries.

SITRANS point level switches



We have a solution for any application

Solids, liquids, slurries or interface?

Configurations with approvals and options for your application needs



PI workshop for specialist
24-ti april



Pitanja

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Hvala!

