Sales presentation

SITRANS P portfolio extension P310 – P DS III – P410

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SITRANS P
The extended pressure family

Basic Line
SITRANS P310

Advanced Line
SITRANS P DS III
SITRANS P410

Premium Line
SITRANS P500

Click here to watch the film
SITRANS P
The new members

SITRANS P310 – new
The Basic transmitter

SITRANS P DS III
Improved

SITRANS P410 – new
High accuracy P DS III version
Best price- / performance choice
The key features at a glance

**SITRANS P410**
Measuring accuracy 0.04%

**SITRANS P DS III**
Measuring accuracy 0.065%

**SITRANS P310**
Measuring accuracy 0.075%

International certified

Optimized specification of linear characteristic and temperature error

Protection class IP66

P310 and P410 technology based on proven P DS III

SITRANS Library integration

New 250 mbar gauge pressure measuring cell
## Suitable for industries and applications
Universal applicable

<table>
<thead>
<tr>
<th></th>
<th>Energy (MAE)</th>
<th>Oil &amp; Gas</th>
<th>Water &amp; Wastewater</th>
<th>Pulp &amp; Paper</th>
<th>Chemical</th>
<th>Pharma &amp; Cosmetics</th>
<th>Food &amp; Beverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SITRANS P310</td>
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<tr>
<td>SITRANS P DS III</td>
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<tr>
<td>SITRANS P410</td>
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- **Best fit**
- **Selective fit**
- **No Focus**
Pressure measurement at the oil & gas industry
application specific examples

**High pressure measurement / crude oil production**

**SITRANS P310**: high pressure measurement directly at the drill hole possible.
- 700 bar gauge pressure measuring cell
- Measuring accuracy of 0.075% sufficient
- Price attractive solution

**Level measurement at the storage tank**

**SITRANS P DS III**: Best choice because of various versions.
- Level version for application specific instrumentation available. E.g. level measurement at storage tank for crude oil
- Broad range of special materials for product wetted parts

**Flow measurement for distribution of refined oil**

**SITRANS P410**: perfect suitable for flow measurements with orifice plate because of high measuring accuracy
- Measuring accuracy 0.04%
- Differential pressure versions PN160 and P420 available
- Square root characteristic for flow measurement configurable

*) All the transmitters comply with the general requirements for oil and gas applications e.g. explosion protection, overvoltage protection up to 6kV, SIL2/3 according to IEC 61508/61511. Stainless steel housings for offshore applications are also available.

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SITRANS P310 application
Gauge pressure measurement

Customer: Qingdao steel mill (China)
Industry: Coking plant

Customer advantages:
• Economic solution → good price-performance ratio
• Easy installation → configuration via 3 pushbuttons

Pressure measurement at the coke oven
Pressure measurement at the steam pipe
206 x SITRANS P310
# Facts at a glance

<table>
<thead>
<tr>
<th></th>
<th>SITRAS P310</th>
<th>SITRANS P DS III</th>
<th>SITRANS P410</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accuracy / Linear characteristic</strong>) (Turn down up to 5:1)</td>
<td>0.075%</td>
<td>0.065%</td>
<td>0.04%</td>
</tr>
<tr>
<td><strong>Total Performance</strong>) (Turn down up to 5:1)</td>
<td>1%</td>
<td>0.29%</td>
<td>0.28%</td>
</tr>
<tr>
<td><strong>Long term stability</strong>)</td>
<td>0.25% / 5 years</td>
<td>0.125% / 5 years</td>
<td>0.125% / 5 years</td>
</tr>
<tr>
<td><strong>Versions</strong></td>
<td>gauge pressure, differential pressure PN160</td>
<td>gauge pressure, absolute pressure, front-flush, differential pressure PN160 / PN420 / PN500 (optional), level</td>
<td>gauge pressure, differential pressure PN160, differential pressure PN420</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td>4-20 mA / HART</td>
<td>4-20 mA / HART / PA / FF</td>
<td>4-20 mA / HART / PA / FF</td>
</tr>
<tr>
<td><strong>Housing material</strong></td>
<td>Aluminum and stainless steel 1.4408 / 316</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Protection class</strong></td>
<td>IP66, IP68, NEMA 4x</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medium temperature / ambient temperature</strong></td>
<td>-40...+100°C / -40...+85°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Certificates</strong></td>
<td>ATEX, NEPSI, FM/CSA, SIL2/3 .....</td>
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*) max. possible accuracy depending on version
# SITRANS P DS III

The improved transmitter

<table>
<thead>
<tr>
<th>Feature / Function</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Now with measuring accuracy 0.065% up to turn downs of 5:1</td>
<td>Optimized plant efficiency</td>
</tr>
<tr>
<td>Optimized specification of linear characteristic and temperature error</td>
<td>Enhanced total performance results in optimized pressure, flow or level measurement</td>
</tr>
<tr>
<td>Protection class IP66</td>
<td>Higher resistance against ambient conditions – jet water</td>
</tr>
<tr>
<td>SITRANS Library integration</td>
<td>Simplified operation and visualization via PCS 7 faceplates</td>
</tr>
<tr>
<td>New 250 mbar gauge pressure measuring cell</td>
<td>Measuring range specific fit for applications &lt; 250mbar possible. Coverage of new applications possible e.g. flue gas measurement at the power station</td>
</tr>
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### SITRANS P410
The high accuracy version of P DS III

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<th>Feature / Function</th>
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<tbody>
<tr>
<td>Measuring accuracy 0.04% up to turn downs of 5:1</td>
<td>Compared to SITRANS P DS III again optimized plant efficiency</td>
</tr>
<tr>
<td>Technology based on proven P DS III</td>
<td>Proven in use transmitter with SIL 2/3 declaration. Usable for safety applications according to IEC 61508 / 61511</td>
</tr>
<tr>
<td>Ordering with P DS III Z-option C41</td>
<td>Easy to order with the known order logic</td>
</tr>
<tr>
<td>Available as gauge- and differential pressure version</td>
<td>Versions cover 90% of the pressure applications</td>
</tr>
<tr>
<td>Huge number of approvals similar to P DS III available</td>
<td>International usage for different branches</td>
</tr>
</tbody>
</table>
# SITRANS P310
The basic transmitter with an attractive price

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<thead>
<tr>
<th>Feature / Function</th>
<th>Benefit</th>
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<tbody>
<tr>
<td>Measuring accuracy 0.075% up to turn downs of 5:1</td>
<td>Economic solution because of best price- / performance ratio</td>
</tr>
<tr>
<td>Technology based on proven P DS III</td>
<td>Proven in use transmitter with SIL 2/3 declaration. Usable for safety applications according to IEC 61508 / 61511</td>
</tr>
<tr>
<td>New MLFB order code 7MF2033 und 7MF2433</td>
<td>Easy to order with the known order logic</td>
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<td>Available as gauge- and differential pressure version</td>
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Measuring accuracy is always a family affair
SITRANS P is what you should think about!

- Best choice because of new performance classes
- Optimized measuring accuracy
- Local operation and adjustment via pushbuttons and display
- Interoperability
- Easy spare part and accessory concept
- Usable for instrumentation into explosion proof areas
- International certified
- Stainless steel housing for offshore applications
Thank you for your attention!

For Process Instrumentation products contact:

Siemens Process Instrumentation
Phone: (800) 365-8766
Fax: (972) 522-4503

usa.siemens.com/pressure