

## PROTRAC

Version, available since	Description	Device Rev.
<b>3.0.0</b> <b>11/2020</b>	<p>This version is only available for HART versions. It is installed in the electronics version 2.0.0. It is not available as an update version, as it can only run on this hardware.</p> <p><b>New functions and modifications:</b></p> <ul style="list-style-type: none"> <li>- General information:                             <ul style="list-style-type: none"> <li>- Use of a new microcontroller</li> </ul> </li> <li>- Communication:                             <ul style="list-style-type: none"> <li>- HART 7</li> </ul> </li> <li>- WEIGHTRAC:                             <ul style="list-style-type: none"> <li>- Real value correction added</li> </ul> </li> <li>- Measurement function:                             <ul style="list-style-type: none"> <li>- Reference value "External radiation" for relays</li> </ul> </li> </ul>	<b>HART: 3</b>
<b>2.1.0</b> <b>08/2019</b>	<p><b>New functions and modifications:</b></p> <ul style="list-style-type: none"> <li>- Measurement function:                             <ul style="list-style-type: none"> <li>- Interference suppression with gamma modulator</li> <li>- Writeable reference time for decay compensation</li> </ul> </li> </ul>	<b>HART: 2</b> <b>FF: 3</b> <b>PA:3</b>
<b>2.0.3</b> <b>02/2018</b>	<p><b>Error corrections:</b></p> <ul style="list-style-type: none"> <li>- Measurement function:                             <ul style="list-style-type: none"> <li>- Prevention of error F041 at very low pulse rates</li> </ul> </li> </ul>	<b>HART: 2</b> <b>FF: 3</b> <b>PA:3</b>
<b>2.0.1</b> <b>10/2016</b>	<p><b>New functions and modifications:</b></p> <ul style="list-style-type: none"> <li>- Measurement function:                             <ul style="list-style-type: none"> <li>- Adjustment of the process damping with limit level applications</li> <li>- The digital output works also with limit level applications The relay can be also used as pure fail safe relay.</li> <li>- NORM compensation added</li> <li>- Automatic filter can be parameterized</li> <li>- Automatic real value correction also possible with negative process value</li> <li>- Timing with interference radiation can be parameterized</li> </ul> </li> <li>- WEIGHTRAC:                             <ul style="list-style-type: none"> <li>- Automatic measurement of the zero rate can be started via the digital input.</li> </ul> </li> <li>- Multigauge:</li> </ul>	<b>HART: 2</b> <b>FF: 3</b> <b>PA:3</b>

## Overview of the software versions

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	<ul style="list-style-type: none"> <li>- More flexible communication on the MGC bus, several instruments can calculate measured values</li> <li>- Summation and NORM compensation with averages and unaverages values selectable</li> <li>- Errors of slaves can be suppressed.</li> <li>- PLICSCOM:               <ul style="list-style-type: none"> <li>- Simultaneous display of two measured values on PLICSCOM</li> <li>- Reset real value correction added</li> <li>- New unit kct/s for indication of pulse rates &gt; 100000ct/s</li> <li>- More detailed presentation of error codes</li> <li>- More flexible selection of the display format</li> <li>- Extended diagnosis presentation</li> <li>- Languages selection with the first operation</li> </ul> </li> <li>- Fieldbus:               <ul style="list-style-type: none"> <li>- With the Foundation Fieldbus EDDs of SOLITRAC, MINITRAC, FIBERTRAC and POINTRAC a setup is now possible</li> </ul> </li> <li>- General information:               <ul style="list-style-type: none"> <li>- Modification of the PIN now while locking the instrument</li> <li>- Error F041 can be suppressed</li> </ul> </li> </ul> <p><b>Error corrections:</b></p> <ul style="list-style-type: none"> <li>- Diagnosis:               <ul style="list-style-type: none"> <li>- Tolerances of the temperature sensors do no longer trigger F040</li> <li>- No more error F030 triggered with a calculated negative density</li> </ul> </li> </ul>	
<p><b>1.8.0</b> <b>07/2014</b></p>	<p><b>New functions:</b></p> <ul style="list-style-type: none"> <li>- Diagnosis               <ul style="list-style-type: none"> <li>- Measured value recording, event memory, parameter change memory</li> <li>- Error F041 Photo multiplier error-will be reset if reason disappears</li> </ul> </li> <li>- WEIGHTRAC:               <ul style="list-style-type: none"> <li>- Moisture compensation</li> </ul> </li> <li>- Measurement function:               <ul style="list-style-type: none"> <li>- New density units PPA and KgA</li> <li>- With application mass flow (tube) : Density and flow rate as reference values for the relay</li> <li>- Automatic real value correction can be triggered cyclically</li> <li>- Improved accuracy MINITRAC 31</li> <li>- Modulated measuring current acts also on the F124 alarm due to increased radiation</li> </ul> </li> <li>- Communication:               <ul style="list-style-type: none"> <li>- HART Variable Command 3 modified</li> </ul> </li> <li>- Functionality 1:               <ul style="list-style-type: none"> <li>- Error correction 1</li> </ul> </li> </ul>	<p><b>HART: 2</b> <b>FF: 2</b> <b>PA:1</b></p>

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	<p><b>Error corrections:</b></p> <ul style="list-style-type: none"> <li>- PLICSCOM:</li> <li>- Fault rectification</li> </ul>	
<p><b>1.7.0</b> <b>06/2013</b></p>	<p><b>New functions and modifications:</b></p> <ul style="list-style-type: none"> <li>- Communication: <ul style="list-style-type: none"> <li>- Profibus PA available</li> </ul> </li> <li>- PLICSCOM: <ul style="list-style-type: none"> <li>- New language: Portuguese</li> </ul> </li> </ul> <p><b>Error corrections:</b></p> <ul style="list-style-type: none"> <li>- PLICSCOM: <ul style="list-style-type: none"> <li>- Fault rectification with limit level applications</li> </ul> </li> <li>- Steam density compensation: <ul style="list-style-type: none"> <li>- Fault rectification</li> </ul> </li> </ul>	<p><b>HART: 2</b> <b>FF: 2</b> <b>PA:1</b></p>
<p><b>1.6.0</b> <b>10/2012</b></p>	<p><b>New functions and modifications:</b></p> <ul style="list-style-type: none"> <li>- Safety: <ul style="list-style-type: none"> <li>- SIL available</li> </ul> </li> <li>- Communication: <ul style="list-style-type: none"> <li>- Software update from Slave over Master</li> </ul> </li> <li>- Measurement function: <ul style="list-style-type: none"> <li>- Software update from Slave over Master</li> <li>- Limit level: Adjustment (covered) with more safety</li> <li>- Limit level: Behaviour of the current output independent from relay settings</li> </ul> </li> </ul>	<p><b>HART: 2</b> <b>FF: 1</b></p>
<p><b>1.5.0,</b> <b>6/2012</b></p>	<p><b>New functions and modifications:</b></p> <ul style="list-style-type: none"> <li>- Communication: <ul style="list-style-type: none"> <li>- Foundation Fieldbus available</li> </ul> </li> <li>- Measurement function: <ul style="list-style-type: none"> <li>- Steam density compensation</li> <li>- Digital output activated</li> </ul> </li> </ul>	<p><b>HART: 2</b> <b>FF: 1</b></p>
<p><b>1.4.1,</b> <b>9/2011</b></p>	<p><b>New functions and modifications:</b></p> <ul style="list-style-type: none"> <li>- WEIGHTRAC 31: <ul style="list-style-type: none"> <li>- Mass flow determination</li> </ul> </li> </ul>	<p><b>HART: 2</b></p>

## Overview of the software versions

Version, available since	Description	Device Rev.
	<ul style="list-style-type: none"> <li>– Measurement function:               <ul style="list-style-type: none"> <li>– Adaptive filter improved</li> <li>– Application mass flow (tube) improved</li> <li>– Measurement of the current input improved</li> <li>– Reset values of the adjustment changed</li> </ul> </li> <li>– Communication:               <ul style="list-style-type: none"> <li>– Improved IIC-Bus communication</li> </ul> </li> </ul> <p><b>Error corrections:</b></p> <ul style="list-style-type: none"> <li>– Measurement function</li> <li>– Temperature compensation of the density measurement corrected with unit API</li> </ul>	
<b>1.0.0, 8/2010</b>	<p><b>First version</b></p> <ul style="list-style-type: none"> <li>– PROTRAC HART</li> </ul>	<b>HART: 1</b>
	<p><b>First version</b></p> <p><b>New functions:</b></p> <ul style="list-style-type: none"> <li>– Functionality 1:               <ul style="list-style-type: none"> <li>– New function 1</li> </ul> </li> </ul> <p><b>Error corrections:</b></p> <ul style="list-style-type: none"> <li>– Functionality 1:</li> </ul> <p><b>Error correction 1</b></p>	

### Legend:

Name	Description
Version	xx.yy.zz xx: Compatibility version. Will be increased when the compatibility to the previous version is no longer given. Value range 0 ... 99. yy: Function extension version. Will be increased when new functions or function changes were carried out on the previous version. Also errors can have been corrected with a function change. Value range 0 ... 99. zz: Error correction version. Will be increased when only errors were corrected on the previous version. Value range 0 ... 99.
available since	Month/Year
Device Rev.	Version number of the instrument defined by Fieldbus. Consecutive integral number

## Overview of the software versions

Name	Description
	Will be increased if in the "Application Layer" modifications were carried out, e.g. new commands, modifications in the data structure in a command.