Conversion Kit
To Add HART Communication Capability
to 875 Series Analyzers

Part Number BS811BV

Kit Inventory
The kit contains the following parts:

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tr>
<td>BS811LU</td>
<td>HART PWA</td>
<td>1</td>
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<tr>
<td>BS811FN</td>
<td>Firmware Upgrade Kit</td>
<td>1</td>
</tr>
<tr>
<td>X0201GA</td>
<td>Board Support</td>
<td>2</td>
</tr>
<tr>
<td>MI 611-207</td>
<td>Instruction</td>
<td>1</td>
</tr>
<tr>
<td>MI 611-227</td>
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**CAUTION**
The PWAs in your analyzer and the new HART PWA use MOS devices that are highly susceptible to damage resulting from electrostatic discharge. It is recommended that all assemblies with MOS devices should be handled with the user grounded via a conductive wrist strap or by standing on an ESD mat.

Installing the Upload/Download Utility Kit
Before installing your new HART PWA, use the Upload/Download Utility Kit BS811FN following the instructions provided in that kit.

--- NOTE ---
It is recommended to use the Upload/Download Utility Kit (BS811FN) even though doing so is not required for HART with the following firmware:
- 875PH with a Firmware Version of 1.10 or higher
- 875EC with a Firmware Version of 2.10 or higher
- 875CR with a Firmware Version of 4.10 or higher.
Installing a HART PWA in a Panel-Mounted Analyzer

Refer to Figure 1 when installing a HART Interface PWA into a 875 Series panel-mounted analyzer.

1. Remove power from the analyzer and disconnect the sensor and I/O wiring.
2. Remove the four cross-recess (Phillips) screws that secure the back cover. Remove the cover.
3. Unplug the ribbon cable from the Sensor PWA. Use care not to bend the connector pins.
4. Remove the four cross-recess (Phillips) screws that secure the Sensor PWA in place. Use care not to lose the associated star-lock and plain washers. Remove the Sensor PWA.
5. Insert the two plastic board supports into the new HART Interface PWA.
6. Position the new HART Interface PWA over the Processor PWA. Line up the new HART Interface PWA connector pins with the mating receptacle on the Processor PWA and gently press the connector into place. Press the two plastic board supports (inserted in Step 5) into the Processor PWA.
7. Replace the Sensor PWA removed in Step 3, inserting all screws partially before tightening.

Figure 1. 875 Series Panel-Mounted Analyzer
8. Replug the ribbon cable that was unplugged from the Sensor PWA in Step 3, using care not to bend the pins.
9. Replace the cover removed in Step 2, inserting all screws partially before tightening.
10. Reconnect the sensor and I/O wiring disconnected in Step 1.
11. Resupply power to the analyzer.
12. Check that the analyzer recognizes the addition of the HART PWA as follows: While in Measure mode, press the Up arrow key. If the display reads HART Analog, the installation was successful. If it reads Analog 2, there is a problem.

Installing a HART PWA in a Field-Mounted Analyzer

Refer to Figure 2 when installing a new HART Interface PWA into a 875 Series field-mounted analyzer.

\[\text{Figure 2. 875 Series Field-Mounted Analyzer}\]

1. Remove power from the analyzer.
2. Remove the bottom cover by removing the four captive screws. Disconnect the sensor and I/O wiring.
3. Remove the four cross-recess (Phillips) screws that secure the display assembly. Lay the display assembly to one side. Leave the display assembly wires and ribbon cables connected.
4. Unplug the ribbon cable from the Sensor PWA. Use care not to bend the connector pins.

5. Remove the four cross-recess (Phillips) screws that secure the Sensor PWA in place. Use care not to lose the associated star-lock and plain washers. Remove the Sensor PWA.

6. Insert the two plastic board supports into the new HART Interface PWA.

7. Position the new HART Interface PWA over the Processor PWA. Line up the new HART Interface PWA connector pins with the mating receptacle on the Processor PWA and gently press the connector into place. Press the two plastic board supports (inserted in Step 6) into the Processor PWA.

8. Replace the Sensor PWA removed in Step 3, inserting all screws partially before tightening.

9. Replug the ribbon cable that was unplugged from the Sensor PWA in Step 4, using care not to bend the pins.

10. Replace the display assembly removed in Step 3, inserting all screws partially before tightening.

11. Reconnect the sensor and I/O wiring and replace the bottom cover removed in Step 2.

12. Resupply power to the analyzer.

13. Check that the analyzer recognizes the addition of the HART PWA as follows: While in Measure mode, press the Up arrow key. If the display reads HART Analog, the installation was successful. If it reads Analog 2, there is a problem.