Dattus Installation Guide

This installation guide provides general information and instructions to correctly store, unpack, and install the Dattus meter.

**Warning** When installing meters, follow any guidelines issued by your company in addition to those given in this guide.

Handling and Storage
Store the meter in a clean, dry environment until time of use. The meter is shipped with protection caps on the inlet and outlet sides to prevent foreign matter from entering the measurement unit as shown in the figure below. Ensure these caps remain in place until mounting the meter in the system.

![Inlet/Outlet Protection Caps](image)

Figure 1: Inlet/Outlet Protection Caps

Unpacking and Inspection
The meter is delivered in a well-supported cardboard box that normally arrives in perfect condition; however, if the box is damaged, notify the carrier immediately of a potential mishandling problem.

The meters are packed individually and each contains the following components:
- Meter with protection caps on the inlet and outlet
- Meter seals
- Calibration Certificate
- Installation Instructions
- Control Drawing
**Meter Orientation**

A Dattus meter can be installed in the metering line without any form of special support. It can also be mounted in any orientation; however, Itron does not recommend mounting with gas entry on the bottom. If liquids are present in the metering line, Itron recommends mounting the meter in a horizontal position and/or the use of a filter designed to remove liquids from the metering line.

When the meter is mounted in the horizontal position, it is highly recommended that the register face out with the readout parallel to the ground as shown in Figure 2 below.

The Dattus meter will only accurately register flow in one direction. The direction of flow is marked on the meter badge and the meter casting has the word “INLET”.

![Figure 2](image)

The Dattus meter may also be mounted vertically. To orient the register properly for a vertical installation, it may be necessary to rotate the register. This can be done by removing the two screws holding the external cover, rotating the housing clockwise, and re-installing the cover as shown in the figure below.

![Figure 3](image)

**Installing Meter**

- Make sure the meter is oriented correctly for installation.
- Remove the protective caps from the inlet and outlet of the meter.
- Install the meter using appropriate 5/8" bolts.
- Tighten the bolts in a cross pattern with 55-60 ft/lbs of torque.
Meter Start-up

1. Slowly open inlet, outlet, and bypass valves as necessary such that the rate of pressurization of the meter does not exceed 4 psig/second.
2. Follow common industry practices to leak test the meter and connections.

**Warning** Always open and close valves slowly, preventing pressure surges that may damage equipment.

Pulse Output

The Dattus meter comes standard with 4 pulse outputs. This is the 6-pin connector on the left face of the meter (labeled as “1”);

- Output Channel #1 – this is the pulse output normally used for meter calibration
- Output Channel #2 – this is the pulse output dedicated for the LCD display
- Output Channel #3 – this is user configurable for volume or alarm pulse output
- Output Channel #4 – this is user configurable for volume or alarm pulse output

These outputs are configurable via the PCLink programming software. Pulse output cable wiring is as shown in the table below:

<table>
<thead>
<tr>
<th>PIN</th>
<th>Color Wire</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>White</td>
<td>Output 2 (+)</td>
</tr>
<tr>
<td>2</td>
<td>Black</td>
<td>Output 4 (+)</td>
</tr>
<tr>
<td>3</td>
<td>Green</td>
<td>Ground (-)*</td>
</tr>
<tr>
<td>4</td>
<td>Orange</td>
<td>Output 3 (+)</td>
</tr>
<tr>
<td>5</td>
<td>Red</td>
<td>Output 1 (+)</td>
</tr>
<tr>
<td>6</td>
<td>Blue</td>
<td>Ground (-)*</td>
</tr>
</tbody>
</table>

* Either Green or Blue wires may be used as the ground (or common) for any of the outputs.

Product Warranty

Itron, Inc. Gas Metering – U.S., 970 Highway 127 North, Owenton, Kentucky 40359-9802, warrants this gas product against defects in materials and workmanship for the earlier of one (1) year from the date the product is shipped by Itron, or a period of one year from the date the product is installed by Itron at the original purchaser’s site. During such one-year period, provided that the original purchaser continues to own the product, Itron will, at its sole option, repair any defects, replace the product or repay the purchase price.

This warranty will be void if the purchaser fails to observe the procedures for installation, operation or service of the product as set forth in the Operating Manual and Specifications for the product or if the defect is caused by tampering, physical abuse or misuse of the product. Itron specifically disclaims all implied warranties including those of merchantability or of fitness for a particular purpose. Under no circumstances will Itron be liable for incidental or consequential damages of any kind whatsoever.

Itron’s liability for any claim of any kind, including negligence and breach of warranty for the sale and use of any product covered by or furnished, shall in no case exceed the price allocable to the product or part thereof which gives rise to the claim. In the event of a malfunction of the product, consult your Itron Service Representative or Itron Gas Metering – U.S., 970 Highway 127 North, Owenton, Kentucky 40359-9802.
Safety Warning:
This product, as of the date of its manufacture, is designed and tested to conform to all government or industry safety standards then existing as may apply to the manufacturer.

The purchaser and user of this product are warned that compliance with the manufacturer’s instructions and procedures is required in order to avoid the hazards of leaking gas resulting from improper installation, start-up or use of this product, and further, that all area fire control, building codes, or other safety regulations established under public laws which regulate or concern the application, installation, operation or general use of this product, should be complied with.

In order to ensure the safe and proper operation of the product, the manufacturer recommends that a qualified installer install this product.