

**State of California**  
Department of Food and Agriculture  
Division of Measurement Standards

Certificate Number: 5398(a)-10  
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***California Type Evaluation Program***  
***Certificate of Approval***  
***for Weighing and Measuring Devices***

**For:**

Hydrocarbon Gas Vapor Measuring Device  
Models: Metris 250, Metris RM and Metris MB  
Capacity: 250 cubic feet per hour @  
0.5 inch H<sub>2</sub>O Differential  
Temperature or non-temperature compensation  
Maximum Operating Pressure: 5 psig

**Submitted by:**

Itron, Inc. (formerly Actaris US Gas Inc.)  
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**Standard Features and Options**

Positive displacement diaphragm measuring module  
Die cast aluminum (top and bottom) casing  
Index register: 4 circle dial, 4 or 5 digit direct read  
Tangent crank 14 revs per ft<sup>3</sup>  
Temperature or non-temperature compensation

This device was evaluated under the California Type Evaluation Program (CTEP) and was found to comply with the applicable technical requirements of California Code of Regulations for "Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Effective Date: April 12, 2010



Edmund Williams, Director

**Itron Inc.**  
**Hydrocarbon Gas Vapor Measuring Device**  
**Models: Metris 250, Metris RM and Metris MB**

**Application:** For commercial measurement of vaporized hydrocarbon gas.

**Identification:** The required information is on an identification badge riveted to the upper meter housing above the index face plate.

**Sealing:** The meter housing separates into two halves by removing the 10 housing screws holding it together. A drilled head housing screw is required under the index face plate. A second drilled head screw is required to attach the index face plate to the upper half of the meter. A third drilled head screw is required to attach the calibration access port to the top of the meter. All three drilled head screws must be connected with a wire security seal connecting the three points. A tamper evident seal covers the second screw on the calibration port.

**NOTE:** When using with an approved remote register index, there must be means to seal the remote interface by a security locking mechanism.

**Test Conditions:** The Metris RM and Metris 250 temperature compensated meters were evaluated. The emphasis of the evaluation was on the device design, operation, performance and repeatability. Several accuracy tests were performed at various flow rates ranging from 3 to 100% of flow capacity using a 5 ft<sup>3</sup> bell prover standard. These tests were repeated after 250 000 ft<sup>3</sup> of air was passed through one device and approximately 263 000 ft<sup>3</sup> was passed through the other. The Metris MB is included in this certificate without additional testing due to identical designs as the Metris RM and 250 without the regulator.

**Certificate of Approval Number 5398-04:** Two types of Metris meters were submitted for testing (model Metris 250 and Metris RM). The third model (Metris MB) was not tested since it was identical to the RM model without the regulator. Accuracy tests were performed at various flow rates from 3 to 100% of flow capacity using a 5 ft<sup>3</sup> bell prover standard. These tests were repeated after 207 000 ft<sup>3</sup> of air was passed through the device. Additional tests were performed on a new redesigned version of Metris at flow rates from 3 to 100% of flow capacity and tests repeated after approximately 360 000 ft<sup>3</sup> has passed through the device.

The results of the evaluation indicate the devices comply with applicable requirements.

**Type Evaluation Criteria Used:** Title 4, California Code of Regulations, 2009 Edition

**Tested By:** Van Thompson (CA)

