

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

Certificate Number: 5272-02

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California Type Evaluation Program
Certificate of Approval
for Measuring Devices

For:

CompuBill Hydrocarbon Gas Vapor Metering System

Multi-Input Pulse Module Unit
Models: PR-32 and PR-64

Automatic Data Collector (ADC)
Model: CU (Central Unit)

Submitted by:

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Standard Features and Options

Multi-Input Pulse Module Unit

Electrical enclosure
Battery back-up
Central processing unit (CPU)
Pulse input multiplexer: 32 meter input capability for Model PR-32
64 meter input capability for Model PR-64

Automatic Data Collector

Electrical enclosure
Battery back-up
Central processing unit (CPU)
Flash EPROM for retention of audit trail event logger during extended power interruptions
2 line x 20 character liquid crystal display (LCD)
Remote data collection via modem
Slave line printer for audit trail requirements

Vapor Meter Register Index Adapter

Badger Model Read-O-Matic

These devices were evaluated under the California Type Evaluation Program (CTEP) and were found to comply with the applicable 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 29, 2002

Mike Cleary, Director

Energy Billing Systems, Inc.
CompuBill Hydrocarbon Gas Vapor Metering System
Models: PR-32 and PR-64
Model: CU (Central Unit)

Application: For use as a computerized remote register pulse counter display system. To be used with approved and compatible hydrocarbon gas vapor meters.

Identification: The required information for the Multi Input Pulse Module Unit (Models PR-32 or PR-64) is on the front cover of the electrical enclosure. The Automatic Data Collector (Model CU) identification is on the inside cover of its electrical enclosure.

Sealing: The Multi Input Pulse Module Unit may be sealed with a wire security seal threaded through two drilled head screws attaching the cover to the electrical enclosure. When protected from environmental conditions, a paper security seal may be placed across the seam of the cover and the electrical enclosure.

The pulse output connection on the left side of the register index adapter has a cover held in place by a drilled head screw. A wire security seal may be threaded through the drilled head screw of the pulse output cover and a drilled head screw that attaches the register cover to the register index adapter to prevent interchanging assigned meter pulse outputs with apartments.

The Automatic Data Collector readings can be altered by unlimited access through the edit mode; therefore, the device must be sealed by Category 3 method of sealing (audit trail).

Access the audit trail information from the choices on the main display.

Using the keypad: () = Display Menu

- Press any key to get into the main menu.
- Press 3 (setup), then enter access code 71239, and then press Next.
- Press 4 (Maint).
- Press 1 (Event Log).
- Press 1 to display the event log or press 2 for the printout menu.
- Pressing 2 will cause the Central Unit to query the operator for verification of printer connection.
- Upon verification, press 1 for a printout of the audit trail.

Operation: Read apartment gas consumption from the main display.

Using the keypad:

- Press any key to get into the main menu.
- Press 1 (Data).
- Enter the two digit module number (ID) from management provided Apartment List.
- Enter two digit apartment number (Input) from Apartment List or scroll to apartment by using the Prev or Next keys after entering an input number. The current reading will be on the right side of the display, top line, with the multiplier and unit of measure underneath (CCF = 100 Cubic Feet).
- Press 7 to view the reading from the previous day.
- Continue to press 7 to obtain readings from up to two months ago.
- Press 9 to return to current reading.
- Press 0 then keypad number 9 twice to return to the main menu.
- Press 0 from the main menu to finish.

Test Conditions: The Multi-Input Pulse Module Unit Model PR-32 interfaced with the Automatic Data Collector Model CU (Central Unit) and Invensys Model S-275 (Certificate of Approval Number 5257-01) hydrocarbon gas vapor meter and Badger Model Read-O-Matic (Certificate of Approval Number 2707-86) index adapter was submitted for an evaluation. The emphasis of the evaluation was on device design, performance, billing format, and interaction with the measuring system. The device was tested for agreement of indications with the vapor meter index register in addition to the functionality of menu driven options and power interruption.

Results of the evaluation indicate the devices comply with applicable requirements.

Type Evaluation Criteria Used: Title 4, California Code of Regulations, 2001 Edition

Tested By: R. Norman Ingram (CA)