

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

Certificate Number: 4158-94  
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**California Type Evaluation Program**  
**Certificate of Approval**  
**for Electric Meters**

**For:**

CompuBill Watt-Hour Metering System  
Multi-Input Electronic Module Unit  
Models: ER-32, ER-64  
ER-D32, ER-D64

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

**Submitted by:**

Energy Billing Systems, Inc.  
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**Standard Features and Options**

**Electronic Watt-Hour Meter Module**

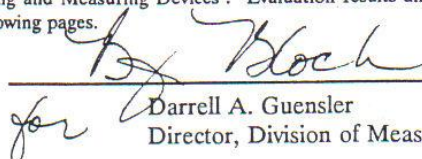
- 120/208/240 VAC service voltage ratings
- Test amperes: TA30
- Class: CL 200 (200 amps per element)
- Frequency rating: 50/60 Hz
- -4 to 140 °F operating temperature range
- 2 line x 20 character LCD display indicates in 1 kilowatt-hour (KWh) to 99999
- Light load test display in 0.001 KWh increments
- A Model ER-64 module can be configured as:
  - (a) 64 single phase elements
  - (b) 32 two phase elements
  - (c) 21 three phase elements
- Automated provision for identification of voltage phase of each element
- Model ER-D64 incorporates dual electronics to prevent data loss
- ER-64 modules (one to 88) interface to one (ADC) Model CU for remote data collection via modem.

NOTE: Each meter element has its own individual current transformer.

See Page 2 for additional standard features and options.

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: October 18, 1994

  
for \_\_\_\_\_  
Darrell A. Guensler  
Director, Division of Measurement Standards

**Energy Billing Systems, Inc.**  
**CompuBill Watt-Hour Metering System**  
**Models: ER-32, ER-64, ER-D32, ER-D64**

**Standard Features and Options:** (Continued)

**Current Transformer:**

- IMS Type 32410-BR1
- Rating: 200:0.2 amp. 60 Hz
- Accuracy: 0.3 Class
- Insulation class: 600 volt
- May be installed without regard to polarity

**Meter Register:**

- Module models have a LCD display on 2 lines x 20 characters
- Display shows meter number (1, 2 or 3 elements per meter) and KWh reading in 1 KWh increments
- Minimum display increment is 0.001 KWh (for light load field testing)
- CU also has LCD display which displays 2 lines x 20 characters (same data as module display)

**Application:** The electronic watt-hour meters and/or system components are to be installed in legally submetered service systems. May be used with any approved, compatible electrical equipment.

**Sealing:** A paper security scale can be applied across the seam between the meter case and cover preventing access to the adjustment mechanism.

**Operation:** Metering system requires a suitable weatherproof enclosure for outdoor installations. These watt-hour meters are not self-contained but use current transformers (CT's) to interpolate the customer's electrical usage and to drive the watt-hour meter accordingly.

**Test Conditions:** The Division of Measurement Standards evaluated the metering system in their laboratory. Field tests were also conducted with the metering system in actual operation.

The results of the evaluation indicate the watt-hour meters and system components comply with applicable requirements.

**Type Evaluation Criteria Used:** California Code of Regulations, 1992 Edition

**Tested By:** Tom Michel (CA), Gary Castro (CA)