FEAT URES
- Accurate regardless of variations in voltage, current, power factor, or load.
- Dual outputs, analog signal proportional to instantaneous watts. Relay closure proportional to Watthours.
- Calibrated with standards traceable to NIST.

APPLICATIONS
- Designed for applications which require UL-listed devices.
- Integration into energy management systems or a variety of sub-metering applications.
- Measurement using direct-connection, current and/or potential transformers.

SINGLE- AND THREE-PHASE MODELS WITH INTERNAL SENSOR

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>F.S.</th>
<th>PHASE</th>
<th>NO. OF ELEMENTS</th>
<th>STANDARD OUTPUTS</th>
<th>MODEL AGH-</th>
<th>WATTHOUR COUNTS/HOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC VOLTS</td>
<td>WATTS</td>
<td>PHASE</td>
<td></td>
<td>±1mAdc</td>
<td>±10Vdc</td>
<td>4-20mA</td>
</tr>
<tr>
<td>0 - 150</td>
<td>0 - 5</td>
<td>1 P - 2 W</td>
<td>1</td>
<td>001B</td>
<td>001D</td>
<td>001E</td>
</tr>
<tr>
<td>0 - 300</td>
<td>0 - 5</td>
<td>1 P - 2 W</td>
<td>1</td>
<td>002B</td>
<td>002D</td>
<td>002E</td>
</tr>
<tr>
<td>0 - 600</td>
<td>0 - 5</td>
<td>1 P - 2 W</td>
<td>1</td>
<td>003B</td>
<td>003D</td>
<td>003E</td>
</tr>
<tr>
<td>0 - 150</td>
<td>0 - 5</td>
<td>3 P - 3 W</td>
<td>2</td>
<td>004B</td>
<td>004D</td>
<td>004E</td>
</tr>
<tr>
<td>0 - 300</td>
<td>0 - 5</td>
<td>3 P - 3 W</td>
<td>2</td>
<td>005B</td>
<td>005D</td>
<td>005E</td>
</tr>
<tr>
<td>0 - 600</td>
<td>0 - 5</td>
<td>3 P - 3 W</td>
<td>2</td>
<td>006B</td>
<td>006D</td>
<td>006E</td>
</tr>
<tr>
<td>0 - 150 L-N</td>
<td>0 - 5</td>
<td>3 P - 4 W</td>
<td>3</td>
<td>007B</td>
<td>007D</td>
<td>007E</td>
</tr>
<tr>
<td>0 - 300 L-N</td>
<td>0 - 5</td>
<td>3 P - 4 W</td>
<td>3</td>
<td>008B</td>
<td>008D</td>
<td>008E</td>
</tr>
<tr>
<td>0 - 600 L-N</td>
<td>0 - 5</td>
<td>3 P - 4 W</td>
<td>3</td>
<td>009B</td>
<td>009D</td>
<td>009E</td>
</tr>
</tbody>
</table>

To calculate full-scale Watts when using potential and/or current transformers:

\[
a = \text{initial transducer calibration (F.S. Watts from table above)} \\
b = \text{current transformer ratio (e.g. 100:5, or 20)} \\
c = \text{potential transformer ratio (e.g. 600:120, or 5)} \\
F.S. \text{ Watts} = a \times b \times c
\]

NOTE: UL-recognized current transformers available from factory.

SPECIFICATIONS

INPUT
 Voltage ........................................ See Table
 Current ........................................ 0-5Aac
 Frequency Range ................................ 58-62Hz
 Power Factor .................................... Any
 Burden
 Voltage ........................................ <0.1VA
 Current ....................................... <0.25VA
 Overload
 Voltage, continuous 150Vac range ............ 175Vac
 300Vac range ............... 350Vac
 600Vac range ............... 600Vac
 Current, continuous transient ............... 2 X F.S.
 transient .................. 50Aac (10sec/hr)
 .................................. 250Aac (1sec/hr)

DIELECTRIC TEST (Input/Output/Case)
 150Vac & 300Vac models ....................... 1800Vac
 600Vac models ................................... 2200Vac
 Surge ........................................... Withstands IEEE SWC test

INSTRUMENT POWER
 Standard ........................................ 90-135Vac, 60Hz, 7.5VA

OUTPUT
 Wh Relay .......................... N/O SPST, 120Vac, 0.5A Rated
 contact closure duration .......................... 200ms
 Closure Calibration (Std.) ...................... 1 Watthour/closure
 Analog Output Loading
 “B” models (0-1mAdc output) .................. 0-10kΩ
 “D” models (0-10Vdc output) ................. 2kΩ min.
 “E” models (4-20mA Adc output) .......... 0 to 500Ω
 Response Time (to 99%) ....................... <400ms

ACCURACY .................................. ±0.2% Rdg. ±0.05% F.S.
 Includes combined effects of voltage, current, load and power factor.
 Analog Output Ripple ...................... <0.5% F.S.

TEMPERATURE & PHYSICAL
 Temperature Effect (-20° to 60°C) ............ ±0.005%/°C
 Net Weight .................................. 3 lbs.

CONNECTION DIAGRAMS AND DIMENSIONS SHOWN ON FOLLOWING PAGES

OHIO SEMITRONICS, INC.
4242 REYNOLDS DRIVE * HILLIARD, OHIO * 43026-1264
PHONE: (614) 777-1005 * FAX: (614) 777-4511
WWW.OHIOSEMITRONICS.COM * 1-800-537-6732
 CONNECTION DIAGRAMS

SINGLE-PHASE CONNECTIONS (ONE-ELEMENT)

**DIRECT CONNECTION**

**USING CURRENT & POTENTIAL TRANSFORMERS**

THREE-PHASE, THREE-WIRE CONNECTIONS (TWO-ELEMENT)

**DIRECT CONNECTION**

**USING CURRENT & POTENTIAL TRANSFORMERS**

THREE-PHASE, FOUR-WIRE CONNECTIONS (2½-ELEMENT)

**DIRECT CONNECTION**

**USING CURRENT & POTENTIAL TRANSFORMERS**
CONNECTION & CASE DIAGRAMS

THREE-PHASE, FOUR-WIRE CONNECTIONS (THREE-ELEMENT)

DIRECT CONNECTION

USING CURRENT & POTENTIAL TRANSFORMERS

WATTHOUR OUTPUT CONNECTIONS

STANDARD OUTPUT
SPST RELAY

CASE DIMENSIONS

CASE HEIGHT 5.88"
1PH 2W  2.9 LBS
3PH 3W  3.3 LBS
3PH 4W  3.8 LBS

All dimensions in inches