

THE WATTNODE is a true RMS AC watt-hour transducer with pulse output (solid state relay closure) proportional to kWh consumed. The WATTNODE provides accurate measurement at low cost to meet your needs for sub-metering, energy management and performance contract applications.

Easy Installation saves you time and money. The WATTNODE is small enough to fit entirely within a standard electrical panel and the screw terminals unplug for easy wiring.

The **Advanced Output** includes separate pulse channels for positive and negative power, for net metering and PV metering. Optional models are available with one pulse output channel per measurement phase, which can be used to monitor each phase independently or to monitor three separate single-phase circuits with one WattNode.

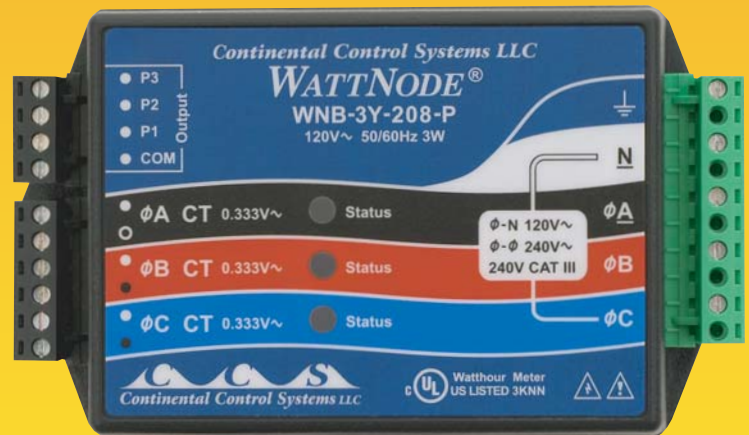
Our **Diagnostic LEDs** provide a per-phase indication of power (green flashing), negative power (red flashing), and advanced diagnostics (yellow flashing) to help troubleshoot connection problems, like swapped CTs, or excessive line voltage. See the User's Guide for a full description.

The **Pulse Series** family measures 1, 2, or 3 phases in 2, 3 or 4 wire configurations. With voltage ratings from 120 to 600 VAC and current transformer (CT) rating from 5 to 4000 amps, there is a WATTNODE combination to meet your AC power measurement requirements.

ACCURACY of the WATTNODE is 0.5% of reading over a wide range of power factors and harmonic content. You get true kWh measurements even with switching power supplies and variable speed drives.

Our **Safe CTs**, with internal burden resistors produce a voltage proportional to the load current. At rated current voltage is only 0.333 VAC. Split-core CTs quickly install on existing wiring and solid-core CTs cost less for new wiring.

277/480
VAC
120/240



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- **Advanced Pulse Output**
Separate pulse channels for positive and negative power. Optional models are available with one pulse output channel per measurement phase.
- **Small Size**
Can be installed in existing service panels or junction boxes.
- **Uses Safe CTs**
Output limited to one volt.
- **Line Powered**
No external power supply required.
- **Digital Signal Processing**
Accurate kWh measurement over a wide harmonic range.
- **Detachable Terminal Blocks**
Easy to install and remove.

SPECIFICATIONS

Measurement Configurations

- Single phase: 2-wire or 3-wire
- Three phase: 3-wire or 4-wire

Electrical

- Line Powered
- Operating Voltage Range: +15%, -20% of nominal
- Power Line Frequency: 50/60 Hz
- CT Input: 0.333 VAC

Pulse Output

- Optoisolated, solid state relay closures handle up to maximum 60 VDC & to 5mA
- Standard: 4.00 Hz Bidirectional Output
- Optional: 0.01 Hz to 600 Hz Bidirectional Output Models
- Optional: Per-Phase Output Models 0.01 Hz to 150 Hz available

Accuracy

- Normal Operation: Line voltage: 80% - 115% of nominal
- Power factor: 1.0
- Frequency: 50- 60 Hz
- Ambient Temperature: 25°C
- Current: 5% - 100% of rated current
- Accuracy: ±0.5% of reading

Environmental

- Operating Temperature: -30°C to +55°C (-22°F to 131°F)
- Operating Humidity: 5 to 90% (RH)

Mechanical

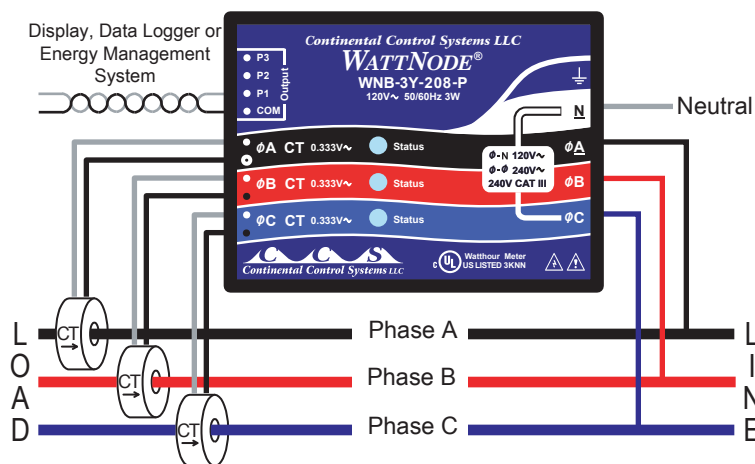
- Enclosure: High impact, UL rated, ABS plastic
- Size: 3.3" x 5.6" x 1.5"
- Connectors: UL, CSA recognized, detachable, screw terminals (14AWG), 600V

Optional LCD Display

- Display: Eight digits, each 0.43" high
- Reset: Wired remote and configurable front panel button
- Enclosure: Panel mount box, 2.95" x 1.52"
- Battery: Lithium 2/3A, replace every four years

WATTNODE®

Advanced Pulse Output AC Power Measurement



WATTNODE

Model	VAC		Phases	Wires
	Line To Neutral	Line To Line		
WNB-3Y-208-P	120	208-240	3	4
WNB-3Y-400-P	230	400	3	4
WNB-3Y-480-P	277	480	3	4
WNB-3Y-600-P	347	600	3	4
WNB-3D-240-P	120	208-240	3	3
WNB-3D-400-P	230	400	3	3
WNB-3D-480-P	277	480	3	3

LCD Displays

Model	Displays	Units
LCDA-E	Energy	WH, kWh, or MWh
LCDA-P	Power	W or kW
LCDA-EP	Energy & Power	WH, kWh, or MWh & W or kW

OPENING CURRENT TRANSFORMERS (SPLIT-CORE)

Model	Inside Diameter	Rated Amps
CTS-0750	0.75"	5, 15, 30, 50, 70, 100, 150
CTS-1250	1.25"	70, 100, 150, 200, 250, 300, 400, 600
CTS-2000	2.00"	600, 800, 1000, 1200, 1500
CTB	Bus Bar	600, 800, 1200, 2000, 3000 (custom)

TOROIDAL CURRENT TRANSFORMERS (SOLID-CORE)

Model	Inside Diameter	Rated Amps
CTT-0300	0.30"	5, 15, 30
CTT-0500	0.50"	15, 30, 50, 60
CTT-0750	0.75"	30, 50, 70, 100
CTT-1000	1.00"	50, 70, 100, 150, 200
CTT-1250	1.25"	70, 100, 150, 200, 250, 300, 400

Current Transformer Output Voltage: 0 - 0.333 VAC @ rated current

MADE IN THE USA

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