

**T**HE WATTNODE for LonWorks combines three true RMS instruments in one: watt meter, watt-hour meter, and demand meter. Typical applications include energy monitoring, performance verification and sub-metering where accuracy at reasonable cost is essential.

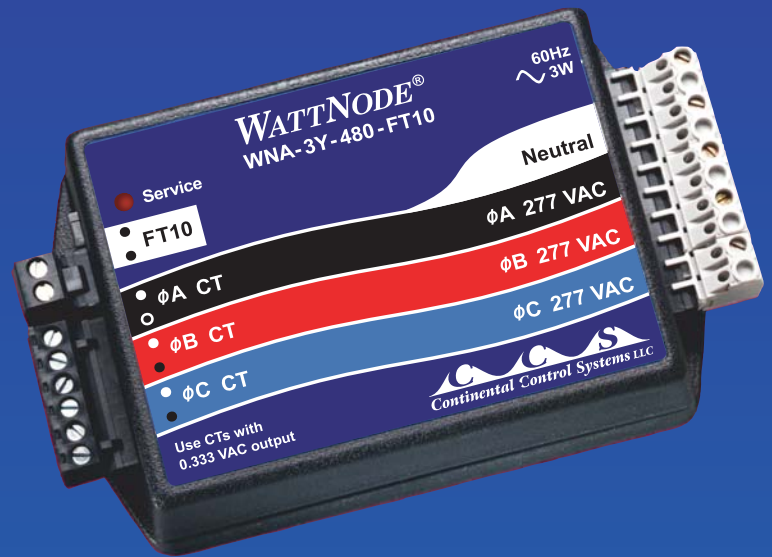
THE WATTNODE for LonWorks complies with LonMark® interoperability guidelines to ensure easy integration in any LonWorks network. Measurements are transmitted over the network as Standard Network Variable Types (SNVTs). See Echelon's Internet site at [www.echelon.com](http://www.echelon.com) for more details.

EASE OF USE and economy of installation were key design criteria. The WattNode's compact size permits installation inside of most electrical service panels and junction boxes. Detachable screw terminals make wiring a snap. WattNodes are line-powered and require no separate power source. With the power line transceiver models, no signal wiring is needed to couple the WattNode to the network. These features add up to BIG installation time and money savings.

ACCURACY of the WATTNODE is 0.5% of reading. The WattNode measures true RMS power even with leading or lagging power factor and chopped or distorted waveforms. This makes the WattNode ideal for monitoring motors and pumps controlled by variable speed drives or loads with switching power supplies.

THE COMPLETE LINE of WattNode for LonWorks models enables you to measure 1, 2, or 3 phases in 2, 3, or 4 wire configurations for voltages from 120 to 600 VAC, 50/60 Hz. You select the current range for each WattNode by choosing from our line of safe, low-voltage output, current transformers. Split-core or toroidal CTs are available for use up to 3,000 Amps.

277/480  
VAC  
120/240



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- **True RMS Measurements**  
*Ideal for loads with high harmonic content*
- **Measures KW & KWH (1Ø or 3Ø)**  
*Essential for performance verification, sub-metering and energy monitoring*
- **LonWorks Interoperable**  
*Easy to integrate into network*
- **User Calibration of Unit With CT**  
*Easy to maintain accuracy in the field*
- **LonWorks Twisted Pair Options**  
*Reduced cost for new building applications*
- **COMPACT SIZE** *Fits inside of standard power panels and junction boxes*
- **Line Powered**  
*No external power supply required*
- **Output: W, KW, WH, KWH, Peak Demand**  
*Multiple measurements in one unit*
- **User-Configurable Power & Alarms**  
*Useful for network control applications*
- **SAFE CTs**  
*Split-core or toroidal CTs, with integral burden resistor; output up to 0.333 VAC*

### Quantities Measured

- Energy in WH or KWH
- Demand (power) in W or KW
- Peak demand (billing demand) in W or KW
- Alarm condition (2 stage, user defined):
  - peak demand
  - instantaneous, min and max

### Quantities Retained during Loss of Power

- Accumulated energy
- Peak demand
- Time of peak demand
- Alarm set points
- Operating range configuration

### Measurement Configuration

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

### LonWorks Interoperability

- Standard Network Variable Types (SNVTs):
  - Electrical Energy: SNVT\_elec\_kwh, SNVT\_elec\_whr, SNVT\_elec\_whr\_f
  - Electrical Power: SNVT\_power, SNVT\_power\_f, SNVT\_power\_kilo
- Installation:
  - Service pushbutton and service LED

### Configuration Control

- Configure operating ranges
- Reset accumulated energy to zero
- Reset peak demand to zero
- Set alarm levels

### Electrical

- Operating Voltage Range: +/- 15% of nominal
- Power Line Frequency Range: 50 to 60 Hz
- Power Consumption: Less or equal to 2.6 Watts

### Accuracy

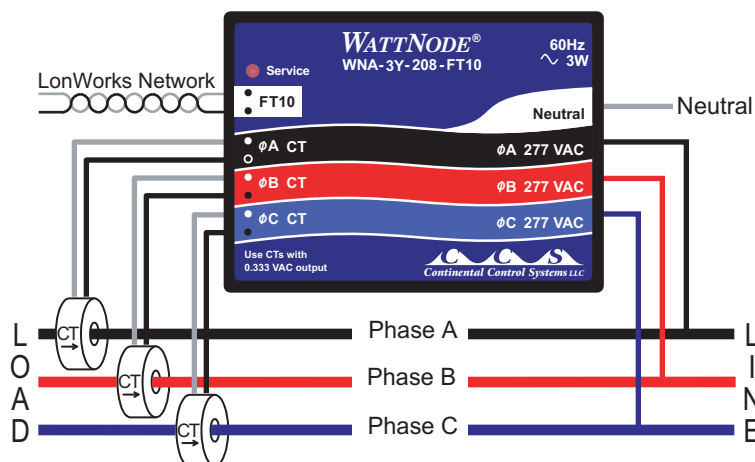
- 0.45% of reading + 0.05% of full scale thru 25th harmonic

### Environmental

- Temperature: -30° C to 60° C
- Humidity: 5 to 90% RH (non-condensing)

### Mechanical

- Enclosure: High impact, UL rated, ABS plastic
- Size: 3.3" x 5.6" x 1.25" (including mounting tabs)
- Connectors: UL, CSA recognized, detachable, screw terminals (14AWG), 600V



### MODELS

Model	VAC		Phases	Wires
	Line To Neutral	Line To Line		
WNA-1P-240-xxxx	120	240	1	2 or 3
WNA-3Y-208-xxxx	120	208-240	3	4
WNA-3Y-400-xxxx	230	400	3	4
WNA-3Y-480-xxxx	277	480	3	4
WNA-3Y-600-xxxx	347	600	3	4
WNA-3D-240-xxxx	N/A	208-240	3	3
WNA-3D-480-xxxx	N/A	480	3	3

Transceiver Suffix -xxxx: -TP78, or -FT10

### 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



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**MADE IN THE USA**