

Continental Control Systems

THE WATTNODE® LOGGER for LonWorks® is a networked, multi-function digital energy meter with internal logging. The WattNode Logger offers true RMS power, energy and demand metering, plus individual phase measurements of voltage, current, power factor, reactive power and energy, and line frequency. The WattNode Logger can log 24,000+ measurement records in non-volatile memory. Typical applications include energy monitoring, sub metering, demand management and stand-alone electrical system data logging.

NETWORKING for LonWorks is easy. A simple twisted-pair connection links all devices together into a LonWorks network. Measurements are transmitted over the network as Standard Network Variable Types (SNVTs).

LOGGING is provided for all important measurements at user-selectable intervals from 1 minute to 12 hours. At a 15-minute interval, it can log for 250 days. Logging is possible in a networked or stand-alone mode. An LNS plug-in downloads the data to a PC file in CSV format.

EASE OF USE and economy of installation were key design criteria. The WattNode Logger's compact size permits installation inside of most electrical service panels and junction boxes. Detachable screw terminals make wiring a snap. The WattNode Logger is line-powered and requires no separate power source.

ACCURACY of the WattNode Logger is 0.5% nominal. Even with leading or lagging power factor and chopped or distorted wave forms, the WattNode Logger measures true RMS power. This makes it ideal for monitoring motors and pumps controlled by variable speed drives or loads with switching power supplies.

THE COMPLETE LINE of WattNode Logger models measures 1, 2, or 3 phases in 2, 3, or 4 wire configurations with nominal voltages from 120 to 600 VAC at 50/60 Hz. Operation from 5 to 5000 Amps is possible by selecting from our line of safe, low-voltage output, current transformers.



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WATTNODE® LOGGER

AC Power Measurement for LONWORKS®

KWH

VOLTS

KVAR

PEAK DEMAND

DEMAND

KW



FREQUENCY

PF

AMPS

LOGGING

- Multiple Measurements
kW, kWh, Demand, kVAR, kVARh,
PF, Amps, Volts, Frequency
- Bidirectional Metering
Enables net metering solution for
PV or wind turbine sites
- LonWorks Network Ready
Simple twisted-pair network
installation, Internet accessible
- LonMark Version 3.4 Certified
Easy to integrate using an open,
interoperable device
- Measures 1 ϕ , 2 ϕ , 3 ϕ Circuits
Flexible for various applications
- Line Powered
No external power supply required
- Compact Size
Fits inside of standard power
panels and junction boxes

Specifications

WATTNODE[®] LOGGER

AC Power Measurement for LonWorks[®]

Quantities Measured

Energy: Real and reactive
 Power: Real and reactive, per phase and sum
 Voltage: Per phase volts
 Current: Per phase amps
 Frequency
 Power Factor: Per phase and average
 Demand: Block or sliding window
 Peak Demand: Value and time

Quantities Logged

Date & Time
 Net Energy (A, B, C & Sum)
 Reactive Energy (Sum)
 Positive Energy (Sum)
 Real and Reactive Power (A, B, C & Sum)
 Voltage, Current & Power Factor (A, B, C)
 Demand

Measurement Configuration

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

LonWorks Interoperability

40 network variables using Standard
 Network Variable Types (SNVTs)
 LonMark Version 3.4

User Controlled Inputs

Set CT size in amps
 Set demand window type and period
 Reset peak demand to zero
 Set time of day

Accuracy

0.5% nominal (see manual for details)
 Time: ± 2 minutes a year (battery backed)

Electrical

Operating Voltage Range: 80% - 115% of nominal
 Power Line Frequency Range: 50 to 60 Hz

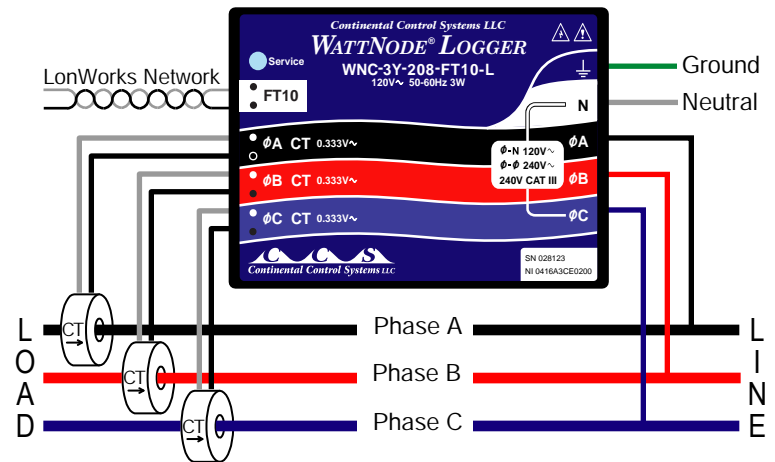
Environmental

Temperature: -30 °C to 55 °C
 Humidity: 5 to 90% RH (noncondensing)

Mechanical

Enclosure: High impact, UL rated, ABS plastic
 Size: 3.3" x 5.6" x 1.5" (includes mounting tabs)
 Connectors: Detachable screw terminals
 (22-12 AWG)

MADE IN THE USA
(888) 928-8663



MODELS

Model	VAC	VAC	Phases	Wires
	Line To Neutral	Line To Line		
WNC-3Y-208-FT10-L	120	208-240	3*	4
WNC-3Y-400-FT10-L	230	400	3*	4
WNC-3Y-480-FT10-L	277	480	3*	4
WNC-3Y-600-FT10-L	347	600	3*	4
WNC-3D-240-FT10-L	N/A	208-240	3	3
WNC-3D-400-FT10-L	N/A	400	3	3
WNC-3D-480-FT10-L	N/A	480	3	3

*Can be used to measure 1, 2 or 3 phase circuits.

OPENING CURRENT TRANSFORMERS (SPLIT CORE)

Model	Inside Diameter	Rated Amps	
		600	1500
CTS-0750	0.75"	5, 15, 30, 50, 70, 100, 150, 200	
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	
		70	400
CTT-0300	0.30"	5, 15, 20, 30	
CTT-0500	0.50"	15, 20, 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



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