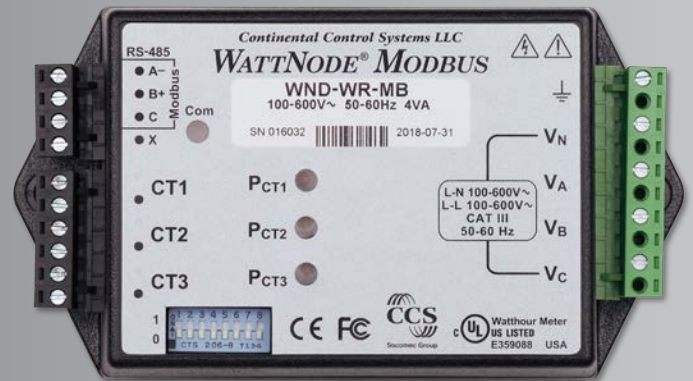


WATTNODE[®]

WIDE-RANGE MODBUS METER

One Model for All Utility Services 100 - 600 Vac



WND-WR-MB

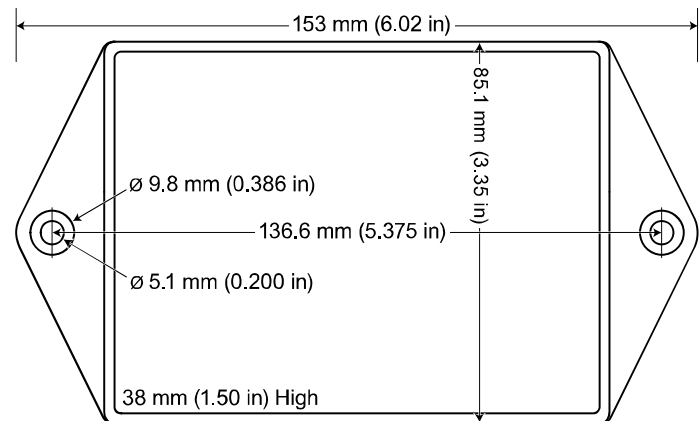
WattNode[®] Wide-Range Meter for Modbus

The new WattNode Wide-Range Meter for Modbus provides 95 electrical measurements over a Modbus RTU RS-485 network. Designed as a universal line-powered meter, it works on any utility service from 100 to 600 Vac, single or three-phase, wye, or delta. The WND-WR-meter has the same dimensions and registers as its WattNode Modbus predecessor but its expanded register map provides many unique features not previously offered in the submetering market. New registers include fast power for export limiting, registers to **correct wiring errors remotely** by reversing a CT's polarity and moving a CT to a different line voltage, potential transformer ratio for 4160 Vac and higher utility services, revenue-grade accuracy, and SunSpec compliance.

Standard Features

- Measures 100 to 600 Vac single-phase or three-phase, wye or delta
- Correct wiring errors remotely
 - Change a CT's polarity
 - Change a CT to a different line voltage
- ANSI C12.20 class 0.5 when used with class 0.3 CTs
- Modbus RTU, RS-485
- 300+ Modbus registers support advanced features
- For use with safe low voltage (0.333 Vac) CTs
- Line powered from 100 to 600 Vac, line-neutral or line-line
- Current Measurement: 5 to 6000 amps
- Fast power feature for export limiting applications
- Nine baud rates from 1.2K up to 115K

Dimensions



Revenue Grade Accuracy

- Meets ANSI C12.1-2014 & ANSI C12.20-2015
- Class 0.5 when used with appropriate CTs

Ordering Information

CCS Part No	Description	Voltage	Price
WND-WR-MB	Wide Range Meter Modbus – RTU	100 – 600 Vac	\$321.36
WN-CAL-CERT	Revenue Grade, Certificate of Calibration	NA	\$55.00

WattNode is a registered trademark of Continental Control Systems, LLC.



Socomec Group

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WND-WR-MB-SB-2019.04.04: Specifications are subject to change

WATTNODE® WIDE-RANGE MODBUS METER

Quantities Measured

- True RMS Energy: kWh per phase and sum
- True RMS Power: watts, per phase and sum
- Power Factor: per phase and average
- RMS voltage per phase and average
- RMS current per phase and average
- Reactive Energy: VAR hours per phase and sum
- Reactive Power: VARs, per phase and sum
- Demand and peak demand
- Frequency

Electrical

- Line-powered: 100 to 600 Vac
- Line Frequency: 45 to 65 Hz
- Nominal Line-to-Neutral Vac: 90 to 347 Vac
- Nominal Line-to-Line Vac: 120 to 600 Vac

Environmental

- Operating Temperature: -40°F to 176°F (-40°C to +80°C)
- Suitable for indoor use
- Suitable for outdoor use when installed in a NEMA 3R or 4R rated enclosure available from CCS

Mechanical

- Enclosure: Metal or polycarbonate options
- Size: 6.02 in. x 3.35 in. x 1.50 in.
(153 mm x 85.1 mm x 38.0 mm)
- Weight: 10.8 oz (307 gm)

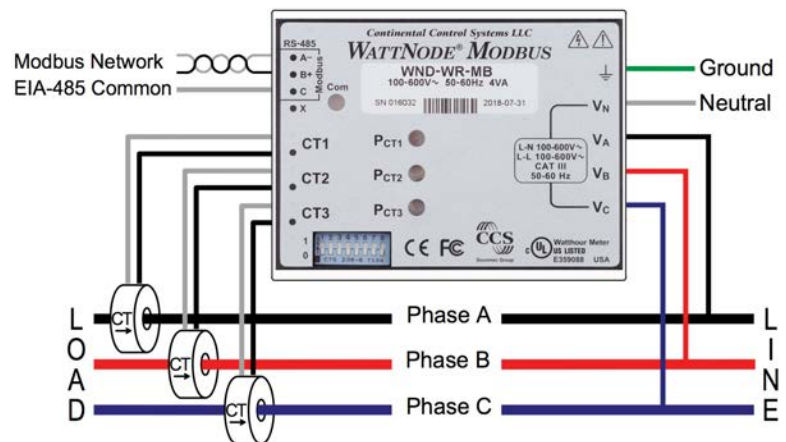
Modbus Communication

- Protocol: Modbus RTU (binary)
- Baud Rates: selectable from 1.2K to 115K
- See manual for other communication options

Regulatory / Safety

- UL Listed (US and Canada), file number E359088
- UL / IEC 61010-1, 3rd Edition
- CAN/CSA-C22.2 No 61010-1-12, 3rd Edition
- FCC: Class B, FCC Part 15
- Meets European Parliament Directive 2014/35/EU: Low Voltage Directive
- Meets European Parliament Directive 2011/65/EU: Hazardous Substances
- Meets European Parliament Directive 2014/30/EU: Electromagnetic Compatibility
- CE, RoHS compliant

WattNode® Wiring Diagram, Three Phase Example



Accu-CT® Split-Core CTs

- Safe, low voltage output, 0.333 Vac
- Primary Ratings: 5 to 600 amps, 600 Vac, 50 or 60 Hz
- UL & cUL, CE, RoHS compliant
- 0.75" and 1.25" opening
- High accuracy options C0.6, C0.3



WattNode Meter Enclosures UL 508A, NEMA 4 Meter Enclosures

- Fully assembled, UL certified
- Polycarbonate or metal options
- Quick delivery, easy install
- Options include circuit breaker, fuse block or standard wire harness without circuit protection
- Low cost, customs available

