WATTNODE®
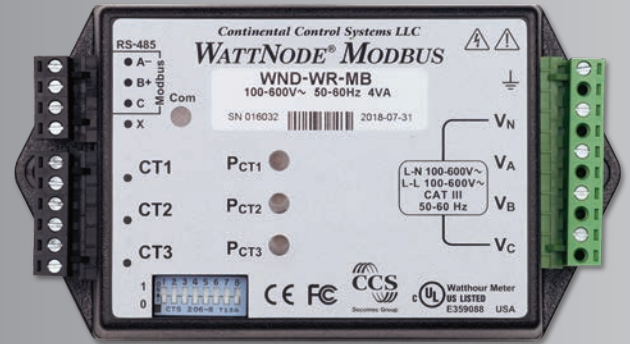## WIDE-RANGE MODBUS METER

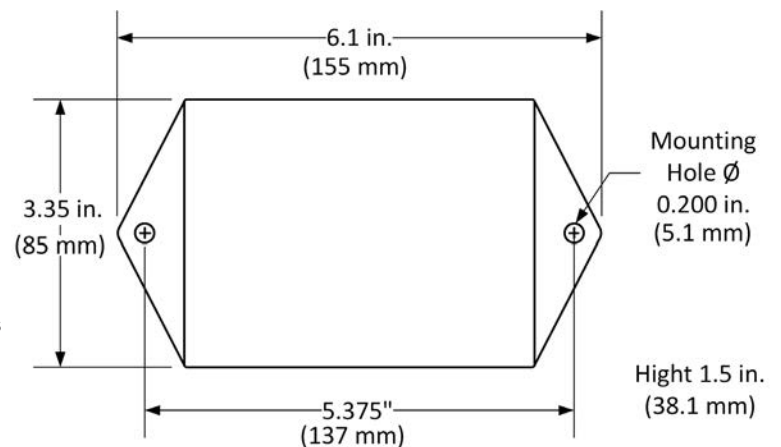**One Model for All Utility Services 100 - 600 Vac**

WND-WR-MB

WattNode® Wide-Range Meter for Modbus

The new WND-WR-MB provides over fifty 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-MB has the same dimensions 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**, potential transformer ratio for 4160 Vac and higher utility services, and SunSpec compliance.

Standard Features

- Measures 100 to 600 Vac single-phase or three-phase, wye or delta
- Line powered from 100 to 600 Vac, line-neutral or line-line
- Correct wiring errors remotely
  - Change a CT's polarity
  - Change a CT to a different line voltage
- PT ratio register for use with potential transformers
- Current transformer disconnect detection
- Modbus RTU, RS-485
- For use with safe low voltage (0.333 Vac) CTs to 6000 amps
- Fast power feature for export limiting applications (100 ms)
- Nine baud rates from 1.2K up to 115K
- SunSpec compliant register list

Dimensions

- 6.1 in. (155 mm)
- 3.35 in. (85 mm)
- 5.375" (137 mm)
- Mounting Hole Ø 0.200 in. (5.1 mm)
- Hight 1.5 in. (38.1 mm)

Revenue Grade Accuracy

- Meets ANSI C12.1-2014 & ANSI C12.20-2015
- Class 0.5 when used with Class 0.2 CTs

Ordering Information

CCS Part No	Description	Voltage
WND-WR-MB	WattNode Wide Range Meter Modbus	100 – 600 Vac
WN-CAL-CERT	Revenue Grade, Certificate of Calibration	NA

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

Continental Control Systems, LLC

Socomec Group

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Electrical Measurements

- 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: 100 to 347 Vac
- Nominal Line-to-Line: 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 NEMA 4 rated enclosure (available from CCS)

Mechanical

- Case Material: PC-ABS
- Size: 6.0 x 3.4 x 1.5 in. (153 x 85 x 38 mm)
- Weight: 10.8 oz (307 gm)

Modbus Communication

- Protocol: Modbus RTU (binary)
- Baud Rates: selectable over Rs-485 from 1.2K to 115K
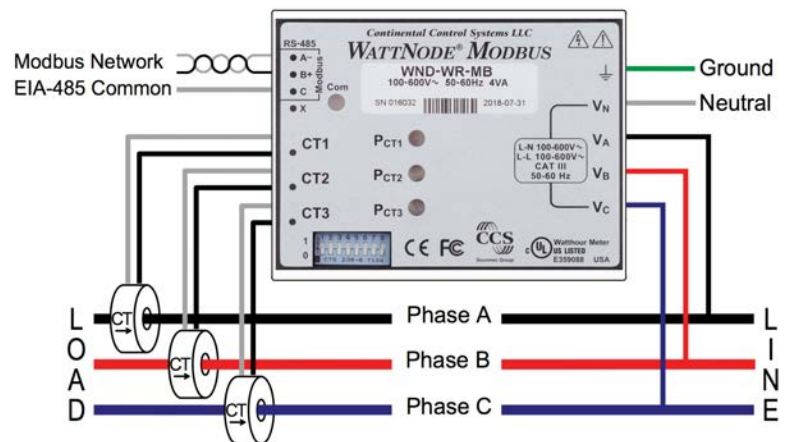- See manual for other communication options

Regulatory / Safety

- U, cUL, 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

⚠ WARNING

This product can expose you to chemicals including Antimony Trioxide, which is known to the State of California to cause cancer. For more information go to: www.P65Warnings.ca.gov

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 and cUL, CE, RoHS compliant
- 0.75" and 1.25" opening
- High accuracy options C0.6, C0.2

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