

# Series 1000 Single Phase Meters

## Sub-Metering Solutions for Accurate Measurement & Verification



Indoor



Outdoor

### DEFINITION

The Leviton Series 1000 line of revenue-grade meters meets all measurement and verification-based opportunities — including load management and LEED rating achievement. Designed to provide a simple and effective process for accurately capturing measurements of power consumption, Series 1000 Meters are easy to specify and install for new construction and retrofits.

- 1- or 2-Phase applications, 120V, 120/240V, 277V or 277/480V
- kWh and Demand (optional)
- Large LCD Display
- Isolated pulse output channel and RS485 Serial Port (ModBus RTU)
- 100A-800A Services

Leviton meters utilize highly accurate current transformers for revenue-grade performance certified to ANSI standards. Competing products use current sensors that do not provide the same level of performance. Leviton offers CTs in solid and split core styles to accommodate all phases of installation and construction. Solid core CTs are ideal for new construction, when power is not

live and wires can easily be threaded through the core. Split core CTs can be installed at any time without having to disconnect wire terminations, making them the optimal choice for retrofitting an existing structure. Split core CTs close securely for fast, precise installation with no need for time-consuming tie wraps and no worries about improper seating or core half separation. Both solid and split core CTs offer high quality, long term accuracy and reliability.

Every Series 1000 Meter has an installer-friendly feedback feature. The red reverse phase indicator acts as an installation diagnostics tool and illuminates if a meter is improperly installed. After installation, the green duty cycle light shows that the meter is collecting the electrical consumption data at the appropriate rate. All 100 and 200 Amp solid core CTs have color-coded labels to easily identify and correctly land the wires at the meter.

## PRODUCT DATA

### APPLICATIONS

Use Series 1000 Meters in commercial, institutional, industrial and government applications for:

- Load profiling and benchmarking
- AMR/BAS/BMS/EMS integration
- Usage aggregation
- Tenant cost allocation
- Measurement and verification
- Energy conservation and cost reduction
- Green building initiatives and Government mandates

### FEATURES

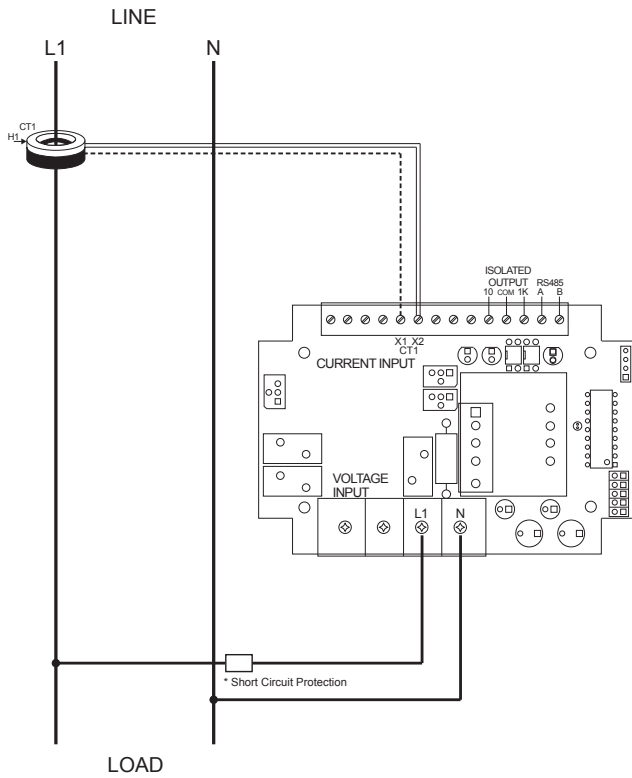
- Measures kWh and demand (optional)
- Conforms to all applicable standards of ANSI C12.1
- Equipped with an Isolated Pulse Output channel and a Modbus RTU standard for easy AMR/BAS/BMS/EMS interface
- Utilizes revenue-grade 0.3% accuracy class 0.1A secondary solid core current transformers (CTs) that conform to all applicable ANSI requirements or 1.0% accuracy split-core CTs
- Up to three sets of CTs per phase can be paralleled per meter without the need for a meter multiplier
- Enclosures include surface mount industrial grade JIC steel indoor and NEMA 4X outdoor
- Interfaces with numerous communication systems
  - Hardwired Automatic Meter Reading (AMR) or wireless AMR
- Large LCD display shows kWh and instantaneous and peak demand (optionally) with manual keyed reset
- Load Indicator LED verifies meter functionality
- Reverse Phase Indicator LED illuminates if the meter is improperly installed
- UL/cUL Listed for UL 916 Energy Monitoring Equipment
- Ten year warranty

### CONFIGURATIONS\*

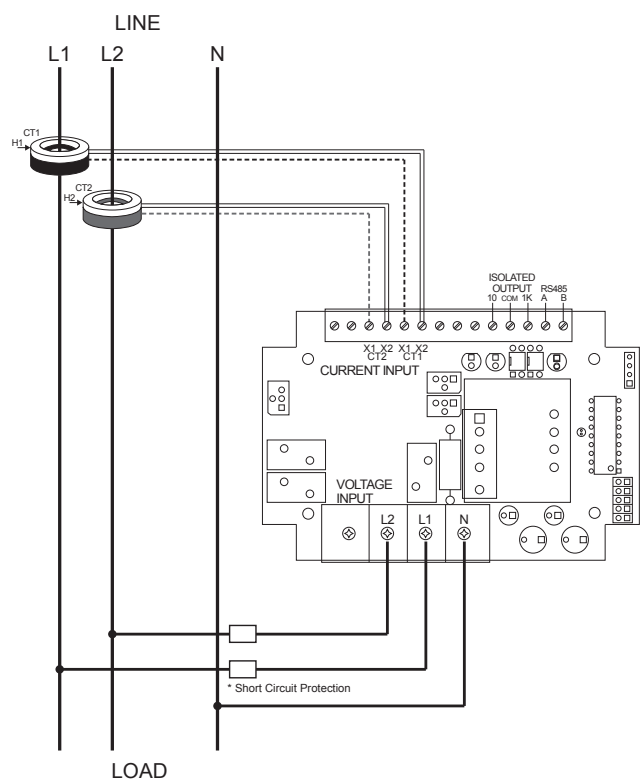
AMPERAGES	PHASE/VOLTAGES
100-800A	1Ø/2W - 120V
100-800A	1Ø/3W - 120/208/240V
100-800A	1Ø/2W - 277V
100-800A	1Ø/3W - 277/480V

\* Contact factory for non-US voltage configurations.

## SINGLE ELEMENT SERIES 1000 HOOKUP DIAGRAM



## DUAL ELEMENT SERIES 1000 HOOKUP DIAGRAM



Leviton recommends solid core transformers (CTs) for revenue-grade accuracy. Our 100A and 200A color coded CTs assist with correct installation by indicating phase monitored. Split core CTs are also available upon request for applications where power cannot be interrupted during installation. Our 100-800 Amp Split Core CTs offer +/-1.0% accuracy.

## PRODUCT DATA



### ORDERING INFORMATION

#### Series 1000 Single Phase Meters

**NOTE:** Current Transformers (CTs) sold separately - see Current Transformers product data sheet for ordering information

CAT. NO.*	DESCRIPTION
<b>INDOOR SINGLE ELEMENT METER, 1PH 2W</b>	
1N120-xxx	120V
1N277-xxx	277V
<b>INDOOR DUAL ELEMENT METER, 2PH 3W</b>	
1N240-xxx	120/208/240V
1N480-xxx	277/480V
<b>OUTDOOR SINGLE ELEMENT METER, 1PH 2W</b>	
1R120-xxx	120V
1R277-xxx	277V
<b>OUTDOOR DUAL ELEMENT METER, 2PH 3W</b>	
1R240-xxx	120/208/240V
1R480-xxx	277/480V

\* When ordering a Series 1000 Meter, replace xxx with the following to indicate amperage ratings:

- 011: 100:0.1A, Max 100A
- 021: 200:0.1A, Max 200A
- 041: 400:0.1A, Max 400A
- 081: 800:0.1A, Max 800A
- Demand Option (for indoor models only): replace the last digit in the suffix with a "D"

**The following products are also part of the Leviton line of integrated metering solutions:**

Series 2000 Meters

Series 3000 Smart Meters

Mini Meters

Multiple Meter Units (MMUs)

Current Transformers (CTs)

Energy Monitoring Software and Hardware

#### LEVITON SPECIFICATION SUBMITTAL

JOB NAME:

CATALOG NUMBERS:

JOB NUMBER:

#### Leviton Manufacturing Co., Inc. Lighting & Energy Solutions

20497 SW Teton Avenue, Tualatin, OR 97062

Telephone: 1-800-736-6682 • FAX: 503-404-5594 • Tech Line (6:00AM-4:00PM P.S.T. Monday-Friday): 1-800-959-6004

#### Leviton Manufacturing of Canada, Ltd.

165 Hymus Boulevard, Pointe Claire, Quebec H9R 1E9 • Telephone: 1-800-469-7890 • FAX: 1-800-563-1853

#### Leviton S. de R.L. de C.V.

Lago Tana 43, Mexico DF, Mexico CP 11290 • Tel. (+52) 55-5082-1040 • FAX: (+52) 5386-1797 • [www.leviton.com.mx](http://www.leviton.com.mx)

**Visit our Website at: [www.leviton.com/les](http://www.leviton.com/les)**

© 2011 Leviton Manufacturing Co., Inc. All rights reserved. Subject to change without notice.

G-8508B/H11-tb  
REV AUG 2011