

Series 3000 Advanced kWh Meters

Sub-Metering Solutions for Accurate Measurement & Verification



Indoor



Outdoor

DEFINITION

The Leviton Series 3000 line of revenue-grade meters meets all measurement and verification-based opportunities — including smart metering and LEED rating achievement. Designed to provide a simple and effective process for accurately capturing measurements of power consumption, Series 3000 Meters are easy to specify and install for new construction and retrofits.

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. CTs come as solid core standard for high-quality, long-term accuracy and reliability. Leviton solid core CTs are cost effective and less susceptible to damage during installation. Leviton also offers split core CTs for easy installation and machined for zero gaps between the core halves. Leviton 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.

Every Series 3000 Meter has a user-friendly feedback feature. They also have an energy-direction arrow (per phase energy and total energy) in the display that tells the installer or user if the meter is installed correctly. For installers, the green duty cycle light shows that the meter is collecting 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 3000 Meters in commercial, institutional, industrial and government applications for:

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

FEATURES

- Measures kWh and peak demand, instantaneous power, volts, amps, watts, VAR and VA per phase
 - Conforms to all applicable standards of ANSI C12.1
 - Equipped with an Isolated Pulse Output channel and an RS-485 serial data port for automated meter reading system interface
 - RS-485 two way serial data port with native Modbus RTU standard:
 - Volts per phase
 - L-N
 - L-L
 - Amps per phase
 - Watts
 - kWh
 - kVAR
 - Total Power (A+B+C)
 - Real Power per phase
 - Total Apparent Power (A+B+C)
 - Apparent Power per phase
 - Total Reactive Power (A+B+C)
 - Reactive Power per phase
 - Power Factor per phase
 - Line Frequency
 - Max Demand
 - Time stamped
 - Year/Month/Day/Hour/Minute/Second
 - Real time clock (RTC)
 - Year/Month/Day/Hour/Minute/Second
- Optional communications include:
- Modbus TCP/IP
 - BACNet
 - BACNet/IP
- Time-stamped and data logged meter readings via the serial port
 - Onboard real-time clock can be synchronized remotely, and includes battery backup for power failures
 - Utilizes revenue-grade 0.3 accuracy class 0.1A secondary solid core current transformers (CTs) that conform to all applicable ANSI requirements or 1% 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)
- Large custom LCD display with scroll button
- Arrows on the custom display indicate load direction; the arrows flash when load current is greater than zero
- UL Listing to Standards for Energy Usage Monitoring Systems, file FTRZ.E124377, or Power Circuit and Motor Mounted Apparatus, file NMTR.E124377
- Ten year warranty

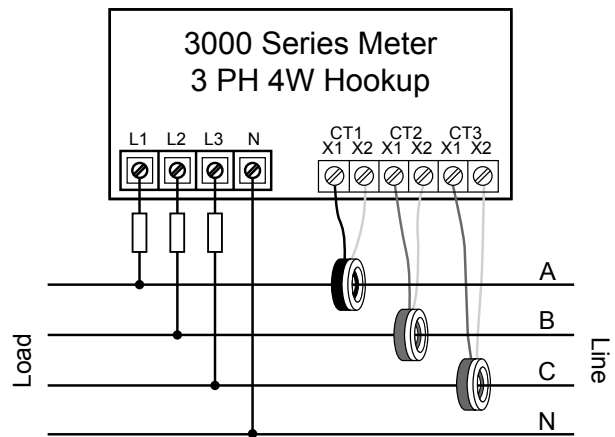
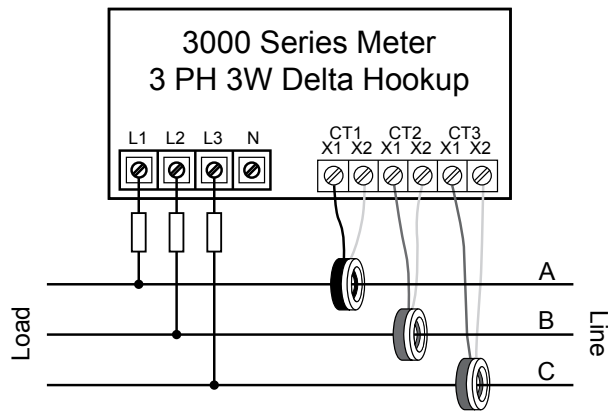
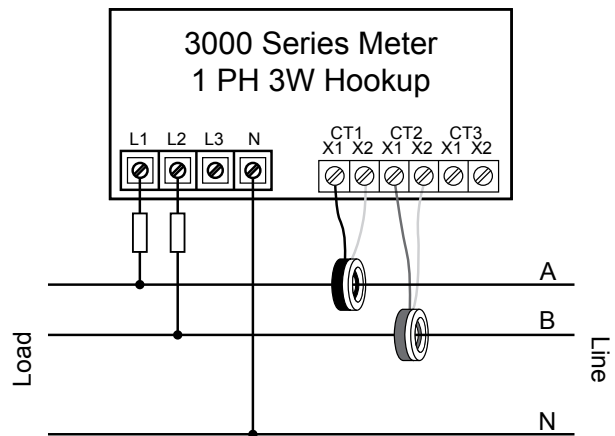
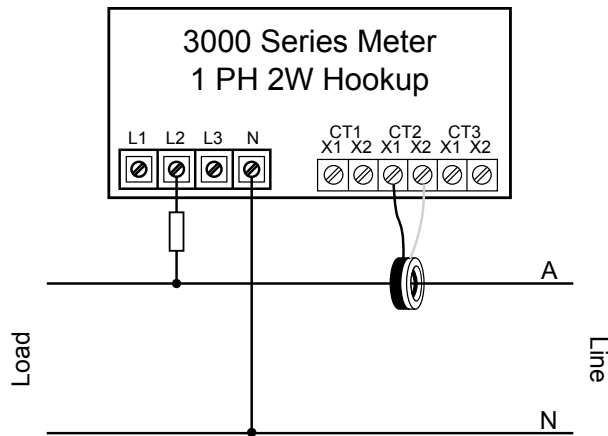
CONFIGURATIONS

AMPERAGES	PHASE/VOLTAGES
100-5000A	1Ø/2W - 120V or 277V
100-5000A	1Ø/3W - 120/208/240V or 277/480V
100-5000A	3Ø/3W - 240V or 480V
100-5000A	3Ø/4W - 120/208V or 277/480V or 347/600V*

NOTE: All meters operate at 50/60Hz.

* For Canadian use only.

HOOKUP DIAGRAMS



NOTE: White side, white dot, or H1 of Current Transformer (CT) face incoming power feed.

Leviton recommends solid core transformers (CTs) for revenue-grade billing. 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 100-5000 Amp Split Core CTs offer +/-1% accuracy.

PRODUCT DATA



ORDERING INFORMATION

NOTE: Current Transformers (CTs) sold separately.

Series 3000 Advanced kWh Meters

LEVITON P/N	DESCRIPTION
INDOOR ADVANCED KWH METERS	
3N208-xxx	120/208/240V, 3PH, 4W
3N24D-xxx	Delta 240V, 3PH, 3W
3N480-xxx	277/480V, 3PH, 4W
3N48D-xxx	Delta 480V, 3PH, 3W
3N600-xxx	347/600V, 3PH, 4W
OUTDOOR ADVANCED KWH METER	
3R208-xxx	120/208/240V, 3PH, 4W
3R24D-xxx	Delta 240V, 3PH, 3W
3R480-xxx	277/480V, 3PH, 4W
3R48D-xxx	Delta 480V, 3PH, 3W
3R600-xxx	347/600V, 3PH, 4W

* When ordering a Series 3000 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
- 161: 1600:0.1A, Max 1600A
- 301: 3000:0.1A, Max 3000A**
- 501: 5000:0.1A, Max 5000A**

** Consult factory for availability.

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

Series 1000 Meters

Series 2000 Meters

Mini Meters

Multiple Meter Units (MMUs)

Current Transformers

Energy Monitoring Software and Hardware

Series 3000 Advanced kWh Meters

LEVITON SPECIFICATION SUBMITTAL

JOB NAME:	CATALOG NUMBERS:
JOB NUMBER:	

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