

# VerifEye™ Series 8000 Meter Multiple Point High Density Smart Meter





The VerifEye™ Series 8000 Multiple Point Meters are designed to meter multi-tenant office buildings, medium-sized retail, institutional, multi-tenant residential and other high density applications. VerifEye Series 8000 meters provide 24 meter elements that are configured as 1 phase, 2 phase or 3 phase meters or monitors.

VerifEye Series 8000 meters combine revenue-grade electrical submetering with building automation communications technology, complying with all regulatory electric safety and communications requirements and meeting stringent ANSI 0.5 Accuracy Class standards.

VerifEye Series 8000 meters transmit data over ModBus and BACnet connections to form an open protocol network.

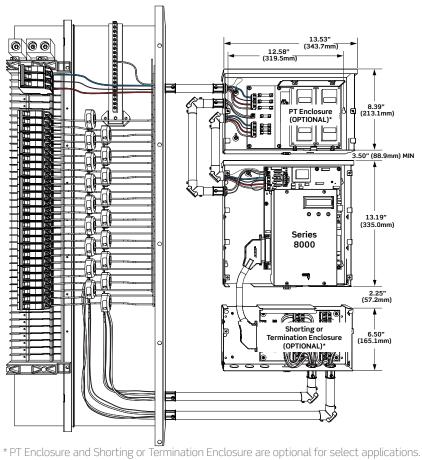
**Please note:** Factory commissioning on the Series 8000 Meter is highly recommended as remote configuration of the meter is not an option offered by Leviton Technical Support.



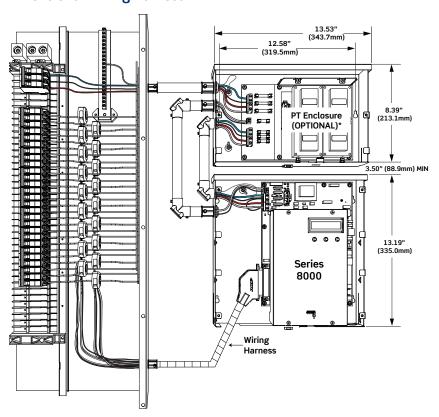
#### **Features**

- Building automation integration and tenant metering
- Multiple point meter—installation and hardware-savings
- Provides multiple electric loads in one device
- Monitors up to 24 current transformers—(8) 3-phase, (12) 2-phase or (24) 1-phase loads
- Current transformers available in 100A to 5,000A
- ModBus TCP, ModBus RTU (RS-485) and BACnet IP standard feature
- Measures kilowatt hours, kW demand, volts, amps
- Interval and net metering
- Configurable via Ethernet or simple ModBus RTU network to BMS or VerifEye software solutions for tenant billing or measurement & verification (M&V)
- Five year warranty
- Use Leviton 0.1A CTs with the Series 8000 Meter—see the Current Transformer Data Sheet for part numbers and details
- California Weights and Measures

## **Dimensions - Terminal Enclosure**



# **Dimensions - Wiring Harness**



# **Product Data** \$8112, \$8124, \$8UTS, 277TS, 277WH



# **Specifications**

Communications			
Protocols	ModBus TCP/IP, DHCP, HTTP, PPP, SNTP, FTP, ModBus TCP, ModBus RTU (RS-485), BACnet IP		
Voltage			
Reference Voltage	120/208V, 120/240V, 240/416V, 277/480V (+/- 10%), 60Hz Note: Meter requires 120V power for operation (Higher voltage supported with potential transformers)		
M&V			
Service Type	Single, Poly & 3-Phase + Neutral		
Accuracy	ANSI C12.20 0.5 Accuracy Class, IEC 62053-22 Class 0.5S		
Measurements	Wh delivered and received, VARh delivered and received, VAh, Vrms, Irms		
Demand Interval	5 to 60 minutes		
Compatibility	2 Pulse inputs to collect data from electric, water and/or gas meters		
Ports	Single 10/100BASE-T Ethernet, RS-232		
BAS Protocols	ModBus TCP, ModBus RTU (RS485), BACnet/IP		
AMR File Type	Human Readable CSV file		
Frequency	Configurable; real-time, hourly, or daily reporting		
Pulse Inputs	2 pulse in terminal blocks (2 wire) compatible with dry form A and solid state form A contacts		
On-Board Memory	Non-volatile flash memory is unaffected by power outages; holds up to 2.4 years of meter data (1 hour intervals) for 20 years		
On-Board Clock	Real-time with battery back-up (holds time up to 10 years)		
Physical			
Weight	14 lbs (6.35kg), 21 lbs (9.52Kg)		
Size	13" (33cm) H x 11.8"(16.9") (30.5 cm) W x 2" (5cm) D		
Enclosure	For indoor use only		
Display	Liquid crystal with button scroll		
Environment			
Operating Temperature	-40 to 158° F (-40 to 70° C)		
Operating Humidity	0 to 90% non-condensing		
Altitude	9843 ft (3000m) maximum		
Pollution	Degree 2		
Codes and Standards			
Emissions	(EMC): FCC Part 15 Class A, ICES-003, IEC6100-4-5		
Safety	TUV and UL certified to IEC/EA/UL/CSA - 61010-1 2nd Edition CSA-C22.2 No. 61010-1-04		
Accuracy & Billing	ANSI/C12.20 0.5 Class		
California Weights and Measures	Select models approved (see ordering information). Certificate # 5780(a)-22.		

# Product Data \$8112, \$8124, \$8UTS, 277TS, 277WH



## **Steps for Ordering**

- 1. Determine residential or commercial & industrial applications
- 2. Determine voltage
- 3. Determine phase requirements

- 4. Determine number of meters
- 5. Choose wiring harness or terminal strips

## **Ordering Information**

Series 8000 Multiple Point Meter			
Voltage	Description	Cat. No.	
Residential			
120/208/240V	12 Circuit - 12 single-phase meters with Wiring Harness	S8112-C12*	
120/208/240V	12 Circuit - 6 two-phase meters with Wiring Harness	S8112-C06*	
120/208/240V	12 Circuit - 4 three-phase meters with Wiring Harness	S8112-C04*	
120/208/240V	24 Circuit - 24 single-phase meters with Wiring Harness	S8124-C24*	
120/208/240V	24 Circuit - 12 two-phase meters with Wiring Harness	S8124-C12*	
120/208/240V	24 Circuit - 8 three-phase meters with Wiring Harness	S8124-C08*	
Commercial & Industria	al Company		
120/208/240V	24 Circuit - 8 x 3, 12 x 2, or 24 x 1 with Terminal Strip	S8UTS-241	
277/480V	24 Circuit - 8 x 3, 12 x 2, or 24 x 1 with Wiring Harness	277WH-241	
277/480V	24 Circuit - 8 x 3, 12 x 2, or 24 x 1 with Terminal Strip	277TS-241	
Potential Transformer	(Optional)		
480V Delta	Delta Potential Transformer (240V to 120V PT)	S480V-011	

<sup>\*</sup> Approved for California Weights & Measures applications

### Wiring Harness vs. Terminal Strips

#### Wiring Harness

Wiring harness models are equipped with a 12-foot long, 24-pair wiring harness. One end of the harness is a connector which connects to the meter and the other end is a color-coded, unstripped wire. The unstripped side can be run into a panel and current transformers (CTs) can be spliced into the appropriate color-coded connection on the harness.

#### Terminal Strips

Terminal Strip models include an additional enclosure and terminal strips for connecting each individual current transformer. Each CT is provided with two labeled screw terminals to land the wiring.

## **Choosing Between a Wiring Harness and Terminal Strips**

- Wiring harnesses offer a less labor intensive solution when all CTs are located in one panel like in a multi-family high rise project. This eliminates the need to extend CT wires out of the panel.
- Terminal strips are ideal for installers who prefer to land each wire and not use a color-coded wiring harness. For CTs located in different panels or different locations with a switchboard, terminal strips offer an easier solution with the ability to extend the current transformer wiring back to the meter location for termination. Terminal strip models also carry a slightly higher cost and should be considered with the project budget.

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