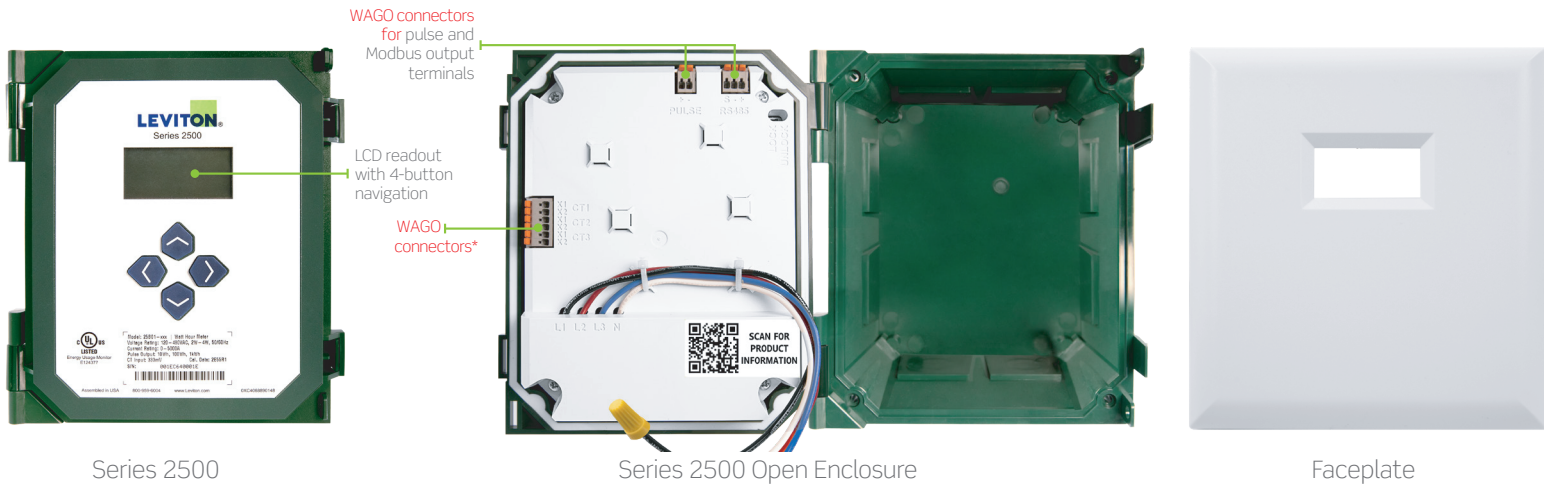


VerifEye® Series 2500 Submeter



Description

The VerifEye® Series 2500 Submeter is a versatile energy monitoring platform designed for standalone operations and integration with AMR/BAS systems with an onboard pulse output and RS-485 terminals supporting Modbus RTU. Engineered for simplicity and scalability, the Series 2500 is ideal for a wide range of applications—including energy management, code compliance reporting, and tenant billing—all with a single model.

Installation is fast and straightforward, featuring tool-free, **WAGO connectors**. This field-programmable meter has a user-friendly LCD setup wizard and built-in diagnostic icons that help verify proper wiring and configuration. Housed in a NEMA 3R enclosure, the Series 2500 is suitable for both indoor and outdoor environments, offering flexible mounting options and tamper-resistant features.

Applications

- Ideal for commercial, industrial, and multi-family applications for:
 - Energy code compliance
 - Tenant billing
 - Energy allocation
 - Energy management
 - Load monitoring

Features

- One model for 1P/2W, 2P/3W, 3P/4W (WYE), 120-480VAC
 - Solid core CTs (100A & 200A)
 - Split core CTs (100A to 800A)
- Line powered from 120-480VAC
- Meets ANSI C12 metering accuracy requirements
- NEMA SM 31000 standards
- Installation features:
 - Easy access terminals for CT wiring with **WAGO connectors**
 - User friendly LCD front panel interface with 4-button navigation
 - Configuration wizard for guided initial meter setup
 - Multiple marked conduit entry locations around the meter housing
 - Built-in diagnostic icons
- Alarms for undervoltage, overvoltage, overcurrent, power factor, and reverse energy to aid with troubleshooting
- Flush mount kit for neat and unobtrusive installation aesthetics
- Limited 5-year warranty

Product Data

25B01-XXX

Measured Parameters

- kWh (consumption)
- kW (demand)
- V (voltage)
- A (current)
- PF (average power factor)

Accuracy

- 0.2% ANSI C12.1 2024 Class 0.2
- NEMA SM31000

Reference Voltage Input Range

- 120-480VAC
- Meter is powered from L1-N

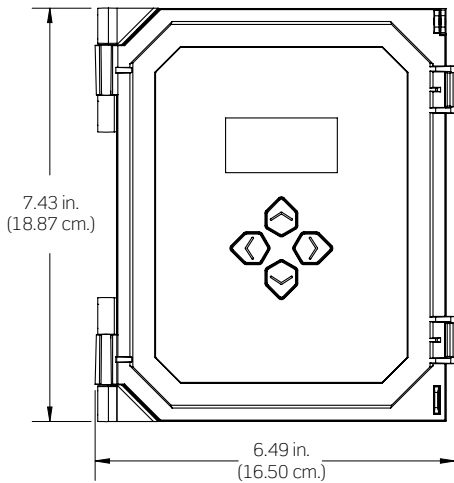
Field Configurable

- 1P/2W, 2P/3W, 3P/4W (WYE)
- Configuration Wizard for quick & easy setup

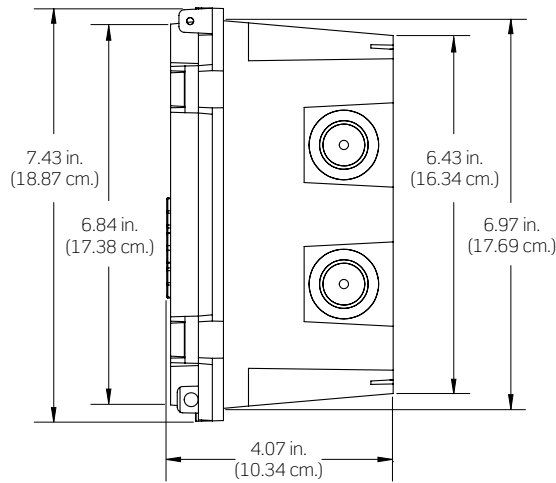
User Interface

- Meter front panel display with 4-button navigation
- Menu driven screens for configuration & data viewing
- Icons for system functionality and alerts

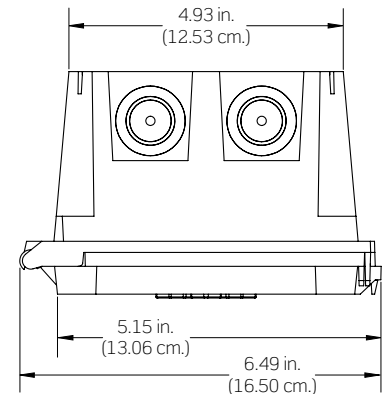
Dimensions



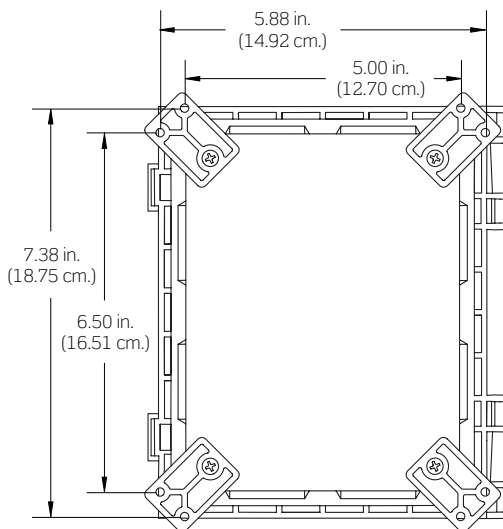
Front View



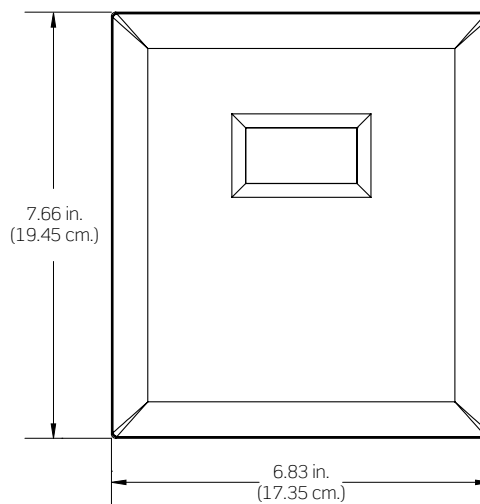
Side View



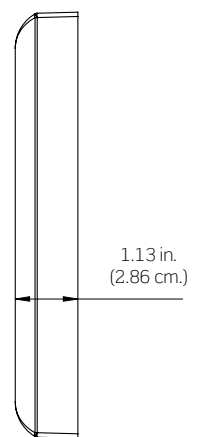
Top View



Back View



Faceplate - Top View



Faceplate - Side View

Specifications

Series 2500 Submeter	
Measurement Accuracy	
Real Power and Energy	Meets ANSI C12.1, Class 0.2%
Current	0.4% (+0.015% per °C deviation from 25°C) from 5% to 100% of range 0.8% (+0.015% per °C deviation from 25°C) from 1% to 5% of range
Voltage	0.4% (+0.015% per °C deviation from 25°C) from 90VAC to 277VAC L-N or 240VAC L-L
Data Update Rate	1 sec
Input Voltage Characteristics	
Measured AC Voltage	<p>This meter is designed to support the following electrical service types:</p> <ul style="list-style-type: none"> • 120/208VAC (120V, L-N) and 277/480VAC, 3-Phase/4 Wire Wye (277V, L-N) • 240VAC, Split-Phase 3 wire (120V, L-N) <p>This meter does not support Delta service. (L-L with no Neutral)</p> <p>Minimum: 90VL-N for stated accuracy Maximum: 304VL-N</p>
Metering Over-Range	120-277VAC, 45mA, +10% (UL Maximums: 304VL-N)
Impedance	2.5 MΩ L-N / 5 MΩ L-L
Frequency Range	45 to 65 Hz
Input Current Characteristics	
CT Scaling	Primary: Adjustable from 100 A to 5,000 A
Measurement Input Range	0 to 0.333 VAC or 0 to 1.0 VAC (+20% over-range), rated for use with Class 1 voltage inputs
Output	
Real Energy Pulse Contacts	N.O., static output (30VAC/DC, 100mA max. @ 25°C, derate 0.56mA per °C above 25°C) Max pulse output frequency 10 Hz
RS-485 Port	2-wire + shield, 1200 to 38400 baud, Modbus RTU
Mechanical Characteristics	
Weight	1.50 lb (0.68 kg)
IP Degree of Protection (IEC 60529)	IP14 (NEMA 3R)
Display Characteristics	Back-lit LCD
Terminal Wire Size	Reference Voltage: 18 AWG (flying leads from the meter) Pulse Output: 24 to 18 AWG RS485 (Modbus): 24 to 18 AWG (Use only shielded data cable) Belden 1120A recommended
Operating Conditions	
Operating Temperature Range	-20° to 70°C (-4° to 158°F)
Storage Temperature Range	-40° to 85°C (-40° to 185°F)
Humidity Range	<95% RH noncondensing
Altitude of Operation	2,000 meters
Compliance Information	
Agency Listing	UL

Ordering Information

VerifEye Series 2500 3-Phase Submeter Kits

Cat. No.	Description
25B01-A01	VerifEye Series 2500 Kit, 25B01 meter with 2 CDV01- W15 Solid Core CTs - 100A
25B01-A02	VerifEye Series 2500 Kit, 25B01 meter with 2 CDV02-W20 Solid Core CTs - 200A
25B01-B01	VerifEye Series 2500 Kit, 25B01 meter with 2 CTV01-KD0 Split Core CTs - 100A
25B01-B02	VerifEye Series 2500 Kit, 25B01 meter with 2 CTV02-KD0 Split Core CTs - 200A
25B01-D01	VerifEye Series 2500 Kit, 25B01 meter with 3 CDV01-W15 Solid Core CTs - 100A
25B01-D02	VerifEye Series 2500 Kit, 25B01 meter with 3 CDV02-W20 Solid Core - 200A
25B01-S01	VerifEye Series 2500 Kit, 25B01 meter with 3 CTV01-KD0 Split Core -100A
25B01-S02	VerifEye Series 2500 Kit, 25B01 meter with 3 CTV02-KD0 Split Core - 200A
25B01-S04	VerifEye Series 2500 Kit, 25B01 meter with 3 CTV04-KD1 Split Core - 400A
25B01-S08	VerifEye Series 2500 Kit, 25B01 meter with 3 CTV08-KG1 Split Core - 800A

VerifEye Series 2500 3-Phase Submeter

Cat. No.	Description
25B01-000	VerifEye Series 2500 Submeter, 3-Phase Programmable Pulse/Modbus, 120/208V or 277/480V, 5A to 800A, compatible with solid core or split core current transformers

VerifEye Series 2500 Submeter Accessories

Cat. No.	Description
25B01-FMK	VerifEye Series 2500 Flush Mount Kit - faceplate and mounting hardware

Compatible CT Options*

Cat. No.	Description	Accuracy
CDV01-W15	Solid Core CT, 333mV:100A, 0.60"	0.2%
CDV02-W20	Solid Core CT, 333mV:200A, 0.78"	0.2%
CTV01-KD0	Split Core CT, 333mV:100A, 1" Window	0.5%
CTV01-WC9	Hinged Split Core CT, 333 mV: 100A, .94" Window	0.5%
CTV02-KD0	Split Core CT, 333mV:200A, 1" Window	0.5%
CTV02-WC9	Hinged Split Core CT, 333 mV: 200A, .94" Window	0.5%
CTV04-KD1	Split Core CT, 333mV:400A, 1.25" Window	0.5%
CTV04-WD5	Hinged Split Core CT, 333 mV: 400A, 1.42" Window	0.5%
CTV08-KG1	Split Core CT, 333mV:800A, 3.0"x3.5" Window	1.0%

*Series 2500 Meters are compatible with 333mV Solid Core and Split Core CTs, sold separately