

VerifEye Series 7200-7300 Branch Circuit Monitor 48 Circuit (24 Virtual Meters)







Series 73D48



72D48-N4X



Solid Core CT



Split Core CT



Hinge Split Core CT



Rogowski Rope CT

Description

The VerifEye™ Series 7200 and 7300 Virtual Element Advanced Branch Circuit Monitors are a cost-effective solution for electrical load management. The Series 7200 and 7300 platform is ideal for high density, branch circuit monitoring applications in both new construction and retrofit applications. The Series 7200 and 7300 monitors up to 48 branch circuits with one single meter board.

The Series 7200 and 7300 supports all industry standard communications over RS485 and Ethernet, including ModBus RTU, ModBus TCP, BACnet MS/TP and BACnet IP for maximum flexibility. The integrated USB port may be used for local configuration.

The Series 7200 and 7300 monitor current, voltage, instantaneous power and demand and energy consumption of each circuit in a panelboard including the main feed. As a circuit approaches the user-configured threshold, alarm indicators are triggered, preventing costly downtime from overloaded circuits or failed loads.

Applications

Use the VerifEye Series 7200 and 7300 Advanced Branch Circuit Monitor in commercial and industrial applications for:

- Data centers
- Tenant energy monitoring
- Energy allocation
- Energy management
- Load monitoring
- Building code compliance

Features

- 48 individual Current Transformer (CT) inputs
- Inputs configurable as follows:
 - 24 virtual meters in any combination of singlephase, two-phase, or three-phase limited to the total 48 CT inputs
 - Consult factory for any other configurations
- Line powered from 90-600V, phase-to-phase
- Bidirectional monitoring
- Meets ANSI & IEC metering system accuracy requirements including branch CTs
- Supports split core and Rogowski Coil CTs
- Meter board features:
 - Easy access terminals for CT wiring, removable connectors
 - Available with or without display embedded options
- Reports volts, amps, power, demand and energy for each circuit—each Series 7200 and 7300 covers a complete 42 breaker panelboard plus mains for a total of 48 circuits
- User-configurable alarm thresholds register for improved load management
- Selectable phase orientation and number of circuits
- Limited 5-year warranty



Measured Parameters*

- Volts
- kW
- aPF
- kWh
- * All parameters for each phase and system total

NOTE: Factory commissioning on the Series 7200 and 7300 Meters is highly recommend as remote configuration of the meters is not an option offered by Leviton Technical Support.

Accuracy

• 0.2% ANSI C12.20-2010 Class 0.2

Wide Range Power

- 90-347 Volts AC Line-to-Neutral
- 600V Line-to-Line, CAT III
- One voltage reference input

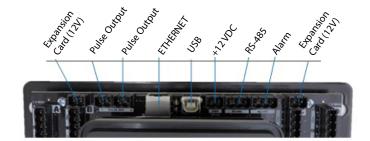
Highly Configurable

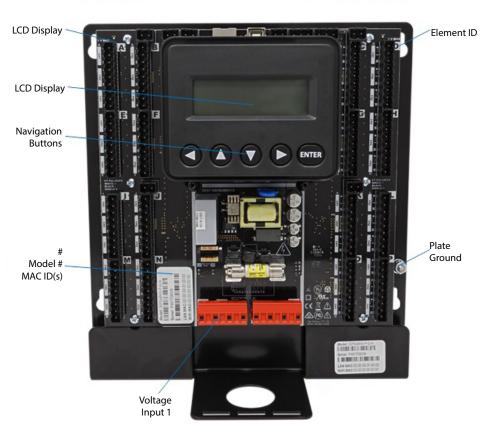
• 1P/2W, 2P/3W, 3P/4W (WYE), 3P/3W (Delta)

User Interace Options

- Meter front panel display unit
- Virtual Element Viewer software with either
- USB direct to the meter or PC/Ethernet

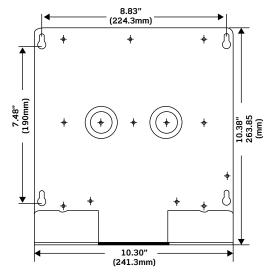
Panel Features







Series 7200 Dimensions

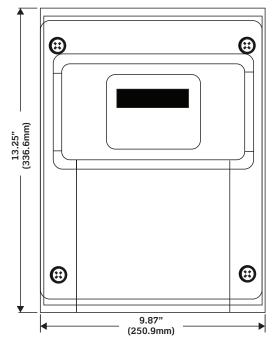


Series 7200 Embedded (Panel Mount)

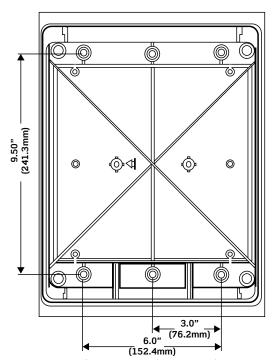
3.31" (84.10mm)

Series 7200 Embedded (Panel Mount)

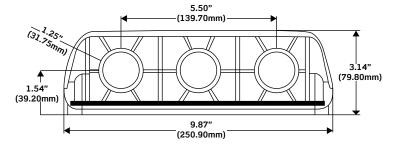
Series 7300 Dimensions



Series 7300 Enclosure Front



Series 7300 Enclosure Back



Series 7300 Enclosure Bottom

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Specifications

Panelboard Monitoring Sys	stem		
Electrical			
Service Type	1P/2W, 2P/3W, 3P/4W, 3P/3W (Delta)		
Power	From L1 Phase to L2 Phase, 90-600VAC RMS CAT III 50/60Hz, 500mA AC Max		
AC Protection	0.5A Fuse 200kA interrupt capacity		
Power Out	Unregulated 12VDC output, 200mA, self-resetting fuse		
Voltage Channels	90-346 Volts AC Line-to-Neutral, 600V Line-to-Line, CAT III		
Current Channels	48 channels, 0.525 VAC max, 333 mV CTs, 0-4,000+ Amps depending on CT		
Maximum Current Input	150% of current transducer rating (mV CTs) to maintain accuracy. Measure up to 4000A with Rogowski Coil CTs.		
Measurement Type	True RMS using high-speed Digital Signal Processing (DSP) with continuous sampling		
Line Frequency	50/60Hz		
Mechanical			
Wire Connections	12-22 AWG 600 VAC, voltage connection must be #14 AWG or larger & 600 VAC rated		
Mounting	Panel Mount/Enclosure		
High Voltage Cover	IP30		
PCBA Mounting	0.5" standoffs #6 (quantity 6, user supplied)		
Mounting Plate	Available with Series 7200 models		
Communications			
Hardware	RS-485, Ethernet and USB (for configuration only)		
Supported Protocols	ModBus, BACnet MS/TP, ModBus TCP or BACnet IP		
Max Distance	ModBus RTU - 1200 meters (4000 ft) max, other network protocols follow standard network management practices		
Environmental			
Operating Temperature	-4° to 140°F (-20° to 60°C) At -4°F, LCD display could be illegible, meter voltage at -4°F must exceed 100 VAC to power the meter		
Operating Humidity	5-95% non-condensing		
Codes & Standards			
Accuracy & Billing	ANSI C12.20 Class 0.2, NIST traceable calibration		
Certifications	UL Recognized(E186827): Applies to mounting plate and circuit board only version, conforms to UL Standard 61010-1 3rd edition, certified to CSA Standard C22.2 No. 61010-1 3rd edition UL Listed (E186827): Applies to indoor enclosure version, conforms to UL Standard 61010-1 3rd edition, certified to CSA Standard C22.2 No. 61010-1 3rd edition		
Listing/Safety	CE EN 61000-6-4: Class A		
Other			
Enclosure Dimensions	13.25" L x 9.87" W x 3.14" D (336.6mm x 250.90mm x 79.80mm)		
Panel Mount Dimensions	10.38" L 9.5" W 3.14" D (263.90mm x 241.3mm 79.80mm)		



Ordering Information

Series 7200 & 7300 Meters			
Cat. No.	Description		
72D48-000	Series 7200 Embedded Panel Mount (no enclosure) Branch Circuit Monitor, 48 inputs, LCD display		
73D48-000	Series 7300 Branch Circuit Monitor, 48 inputs, LCD display, NEMA 1 enclosure		
VerifEye UL508	A Configured Panel Solutions		
Cat. No.	Description		
72D48-N4X	VerifEye 72D48 S7000 Virtual Element 48 input Meter (NEMA 4X Enclosure)		
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%	
CTV5X-WA4	Hinged Split Core CT, 333 mV: 50A, .40" Window	0.5%	
CTV01-KD0	Split Core CT, 333mV:100A, 1" Window	0.5%	
CTV01-WC9	Hinged Split Core CT, 333 mV: 100A, .94" Window	1.0%	
CTV02-KD0	Split Core CT, 333mV:200A, 1" Window	0.5%	
CTV02-WC9	Hinged Split Core CT, 333 mV: 200A, .94" Window	1.0%	
CTV04-KD1	Split Core CT, 333mV:400A, 1.25" Window	1.0%	
CTV04-WD5	Hinged Split Core CT, 333 mV: 400A, 1.42" Window	1.0%	
CTV08-KG1	Split Core CT, 333mV:800A, 3.0"x3.5" Window	1.0%	
CRV50-LR2	5-4000A Rogowski Coil CT 16", 4.5" Inner Coil Diameter, 131mV/1000A @ 60Hz, 109.2mV/1000A @ 50Hz	<0.2% accuracy	
CRV50-LR4	5-4000A Rogowski Coil CT 24", 7.65" Inner Coil Diameter, 131mV/1000A @ 60Hz, 109.2mV/1000A @ 50Hz	<0.2% accuracy	

^{*}Series 7000 Branch Circuit Monitors are compatible with 333mV CTs, sold separately

Product Data 7XD48-000



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