

VerifEye™ Series 6000 Industrial Panel Mount Meter With NEMA 4X Enclosure



Series 61N00 Meter



Split Core CT



Rogowski Coil CT

Description

The VerifEye™ Series 6000 Panel Mount Meters are designed to monitor a comprehensive data set of electrical parameters for industrial applications. These meters come in a NEMA 4X enclosure and are offered with a range of Split Core and Rogowski smart current transformers to cover a broad range of applications. The integrated configuration wizard makes initial setup quick and easy, reducing commissioning time and providing reliable results.

The Series 6000 meters offer a Modbus RTU (RS485), Modbus TCP and BACnet (Ethernet) interface. The Ethernet port also features a browser based web interface for displaying all the monitoring data.

Applications

- Industrial Electrical Load Management
- OEM Panel Shop Applications
- Motor Control Centers
- Portable Power Solutions
- Switchboard and Service Entrance Applications

Features

- Temperature range: 14°F to 158°F (-10 to 70°C)
- 50/60 Hz
- Measurement Voltages: 50-300V L-N, 87-520V L-L, 45-65Hz
- Real-time measurement of electrical values with graphical display
- Manage load shedding functionality from the display
- Power quality analysis of service and loads
- Measurement of active, reactive, and apparent energy
- Alarms features to notify when parameters are outside defined ranges
- Auto-ranging CTs simplify setup and eliminate mistakes
- CT options from 25A to 6000A
- cULus Listed
- CE compliant
- Five year warranty

Measured Parameters

Multi-measurement

- Currents: I1, I2, I3, In, Isystem
- Voltages & frequency: V1, V2, V3, VN, Vsystem, U12, U23, U31, Ussystem
- Powers
 - P1, P2, P3, P, Q1, Q2, Q3, Q, S1, S2, S3, ΣS
 - Predictive powers ΣP, ΣQ, ΣS
- Power factor
 - PF1, PF2, PF3, ΣPF, Cos φ & tangent φ
 - Instantaneous values per phase

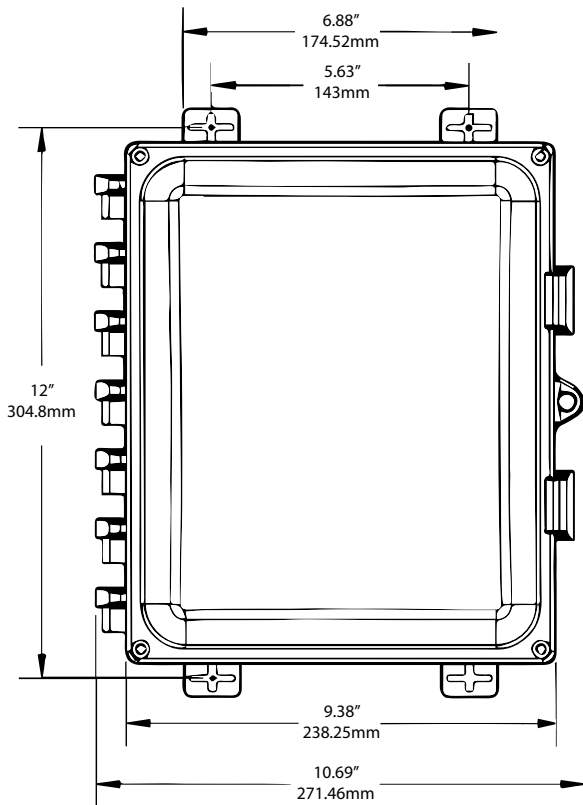
Metering

- Active energy: +/- kWh
- Reactive energy: +/- kvarh
- Apparent power: kVAh
- Multi-tariff (8 max)

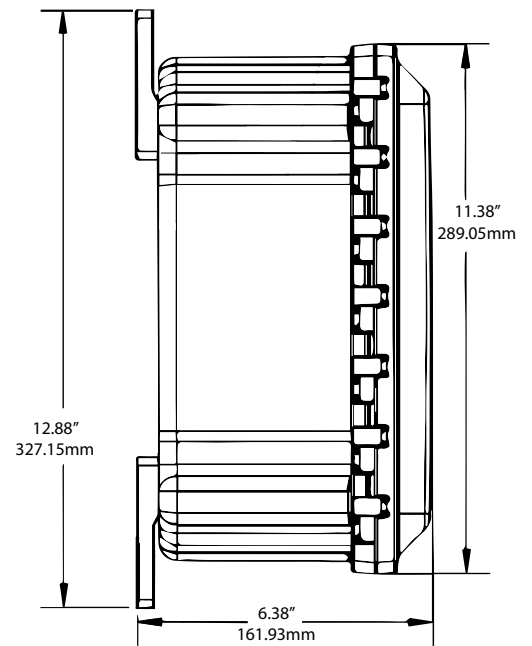
Quality

- Voltage Imbalance
 - Vdir, Vinv, Vhom, Udir, Uinv, Unba, Vnba, Vnb, Unb
- Current unbalance
 - Idir, Iinv, Ihom, Inba, Inb
- Total harmonic distortion
 - Currents THDi1, THDi2, THDi3, THDiN, TDDI
 - Phase-to-neutral voltage THDv1, THDv2, THDv3
 - Phase-to-phase voltage THDu12, THDu23, THDu31
- Harmonics - individual values up to the 63rd
 - Currents: I1h, I2h, I3h, INh
 - Phase-to-neutral voltage: V1h, V2h, V3h
 - Phase-to-phase voltage: U12h, U23h, U31h
- Quality events
 - Voltage sags, cut-offs and swells EN50160
 - Kfactor & Crest factor

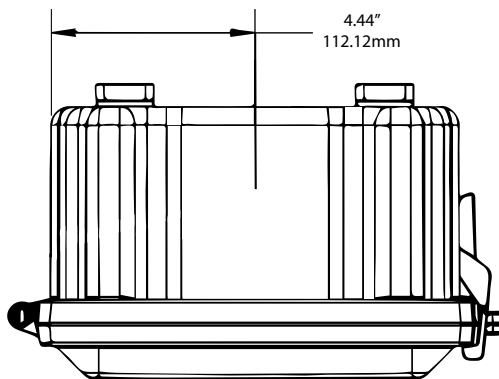
Meter Dimensions



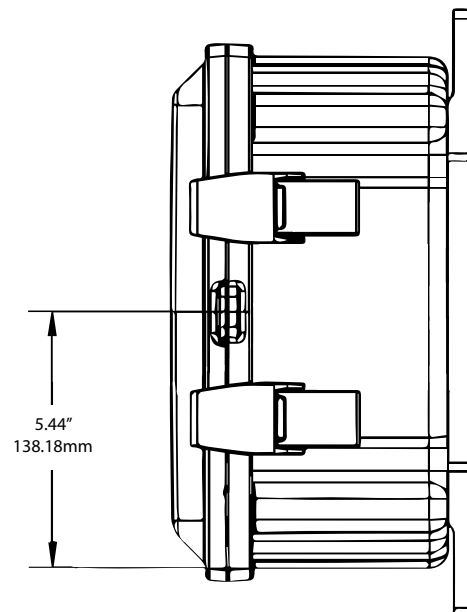
Front View



Left View

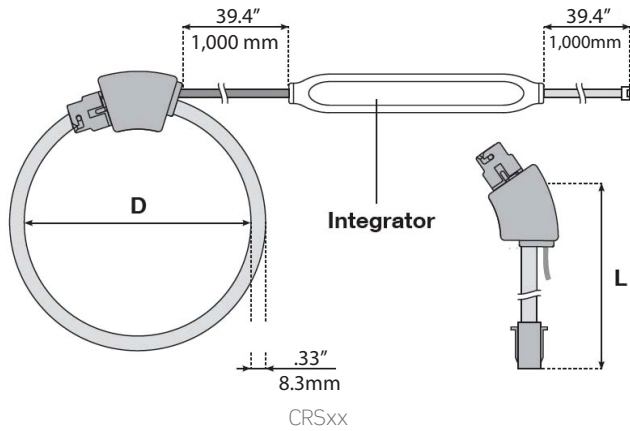


Top View

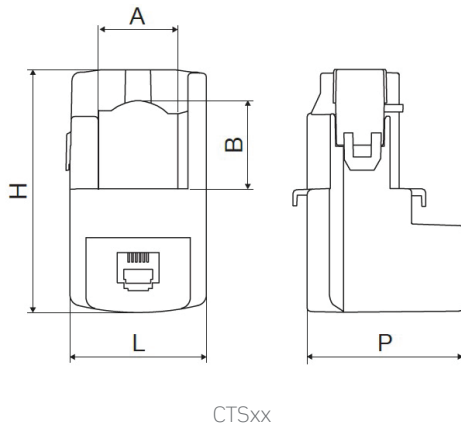


Right View

CT Dimensions



	Integrator	Diameter (D)	Length (L)
CRS4K-WRL	8.04" x .75" x 0.6" (128 x 19 x 15mm)	7.87" (200mm)	24.72" (628mm)
CRS6K-WRM	8.04" x .75" x 0.6" (128 x 19 x 15mm)	11.81" (300mm)	37.09" (942mm)
CRS6K-WRN	8.04" x .75" x 0.6" (128 x 19 x 15mm)	23.62" (600mm)	74.21" (1885mm)



	LxHxP	A	B	Window	l nom.	l max.
CTS1A	1.02" x 1.73" x 1.10" (26 x 44 x 28mm)	—	—	10mm	25...63A	75.6A
CTS2B	1.14" x 2.63" x 1.10" (29 x 67 x 28mm)	0.55" (14mm)	0.59" (14mm)	14mm	40...160A	192A
CTS3C	1.45" x 2.56" x 1.69" (37 x 65 x 43mm)	0.82" (21mm)	0.90" (23mm)	21mm	63...250A	300A
CTS6D	2.08" x 3.38" x 1.85" (53 x 86 x 47mm)	1.26" (32mm)	1.30" (33mm)	32*mm	160...600A	720A

* max = 1.18" x 0.98" (30x25mm)
 max - 1.26" (32mm)

Specifications

Measurement Voltage	50-300V L-N 87-520V L-L 45-65Hz
Control Power, DC	3W max, cULus and CE: 125 to 300VDC (external DC current limiting required)
Input Range	Split Core CTs: 25-63A, 40-160A, 63-250A, 160-600A Rogowski CTs: 200-4000A 8", 1600-6000A 12", and 1600-6000A 24"
Outputs	
Max Voltage	30VDC, 20mA max
Real Energy Pulse	N.O. static
Alarm Contacts	N.C. static
Serial Port	RS-485 2-wire Modbus RTU (1200 baud to 38.4 kbaud)
Ethernet Port	Modbus TCP/IP, BACnet IP, & integrated Webview User Interface
Mechanical	
Dimensions	10.69" (271.4752mm) x 6.38" (161.925mm) x 12" (304.8mm)

Specifications (Continued)

Environmental	
Altitude	<2000m maximum
Operating Temperature	14 to 158°F (-10 to 70°C)
Storage Temperature	-13 to 185°F (-25 to 85°C)
Operating Humidity	70°C <97% to RH non-condensing
Pollution	Degree 2
Protection	Enclosure IP65 (NEMA 4X), IP52 (NEMA 5) Meter Front Panel, IP20 (NEMA 1) Meter Rear Panel
Codes & Standards	
Safety	UL61010
Accuracy	Meter: 0.2 Class, Split Core CT: 0.5 Class, Rogowski CT: 1.0 Class
Listings	cULus, CE compliant

Ordering Information

Series 6000 Panel Mount Meter With NEMA 4X Enclosure		
Voltage	Description	Cat. No.
Universal 3PH 3W/4W	Modbus RTU (RS485), Modbus TCP (Ethernet), and BACnet IP interface	61N00-000
Current Transformers*		
.40 in (10mm) ID, 0.5A - 75.6A	Series 6000 Split Core CT	CTS1A-K10
.55 in (14mm) ID, 0.8A - 192A		CTS2B-G14
.83 in (21mm) ID, 1.26A - 300A		CTS3C-G21
1.26 in (32mm) ID, 3.2A - 720A		CTS6D-G32
24.72 in (628mm) overall length, 7.88 in (200mm) ID, 12A - 4800A	Series 6000 Rogowski CT	CRS4K-WRL
37.09 in (1100mm) overall length, 11.81 in (300mm) ID, 32A - 7200A		CRS6K-WRM
74.21 in (1885mm) overall length, 23.62 in (600mm) ID, 32A - 7200A		CRS6K-WRN
CT Cables*		
Description	Cat. No.	
Series 6000 Meter - CT Cable RJ12 - 1x5M	CCSRJ-105	
Series 6000 Meter - CT Cable RJ12 - 1x10M	CCSRJ-110	
Series 6000 Meter - CT Cable RJ12 - 3x1M	CCSRJ-301	
Series 6000 Meter - CT Cable RJ12 - 3x2M	CCSRJ-302	
Series 6000 Meter - CT Cable Adapter RJ12 Female to Female	CCSRJ-3FF	

*CTs and cables are ordered separately

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