

NEMeter 48

Multi-Circuit Submeter



FEATURES

- 48-channel multi-circuit monitoring
- Revenue-grade Class 0.2 accuracy
- Supports single-phase and three-phase systems
- Ethernet, BACnet, and Modbus communications
- Split-core, solid-core, hinged, and Rogowski-style CTs
- PowerTrack Online Cloud ready
- CT orientation verification
- Phase loss alarm capability
- UL Recognized/Listed and CE



CAPACITY

48 CHANNELS

Multi-circuit monitoring



ACCURACY

CLASS 0.2

Revenue-grade Accuracy



FLEXIBILITY

DUAL VOLTAGE INPUTS

Track two systems at once



CONNECTIVITY

REMOTE ACCESS

Cloud & BAS Integration

The NE Meter 48 is a versatile multi-circuit submeter designed for commercial, industrial, tenant submetering, and data center applications. Supporting up to 48 single-phase or 16 three-phase loads, it delivers revenue-grade accuracy with real-time monitoring and flexible CT compatibility.

Supporting BACnet and Modbus communications via RS-485 and Ethernet, the meter also offers PowerTrack Cloud connectivity, dual voltage inputs, and simple installation for a wide range of monitoring applications.

APPLICATIONS

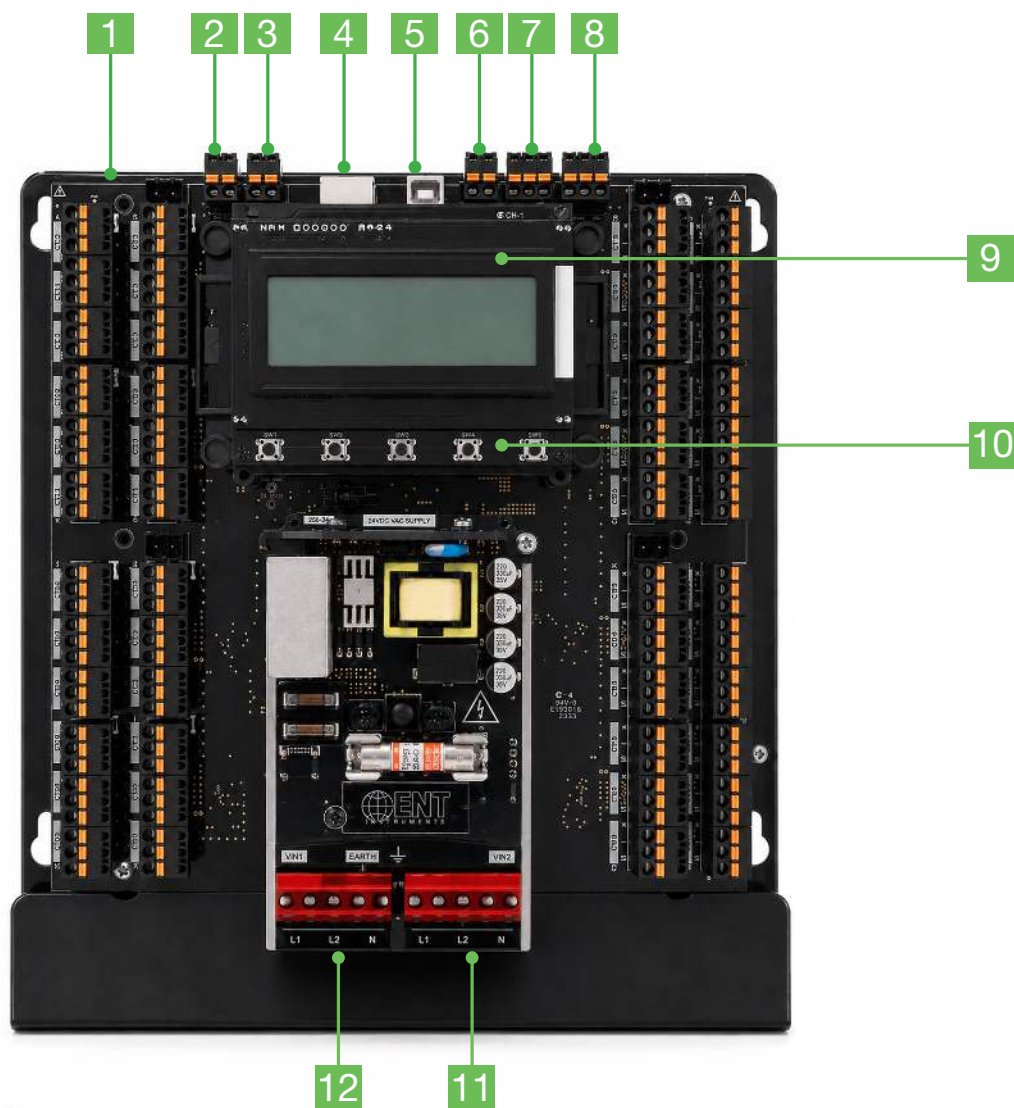
Tenant Energy Allocation

Commercial & Mixed-Use Buildings

Energy Management / Benchmarking

BAS / EMS Integration

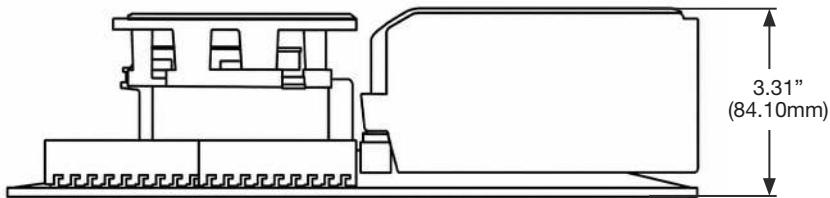
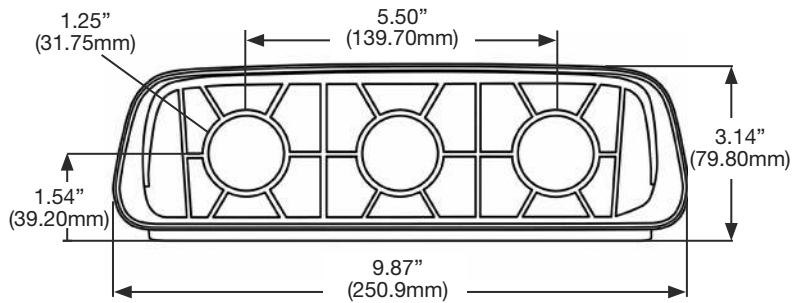
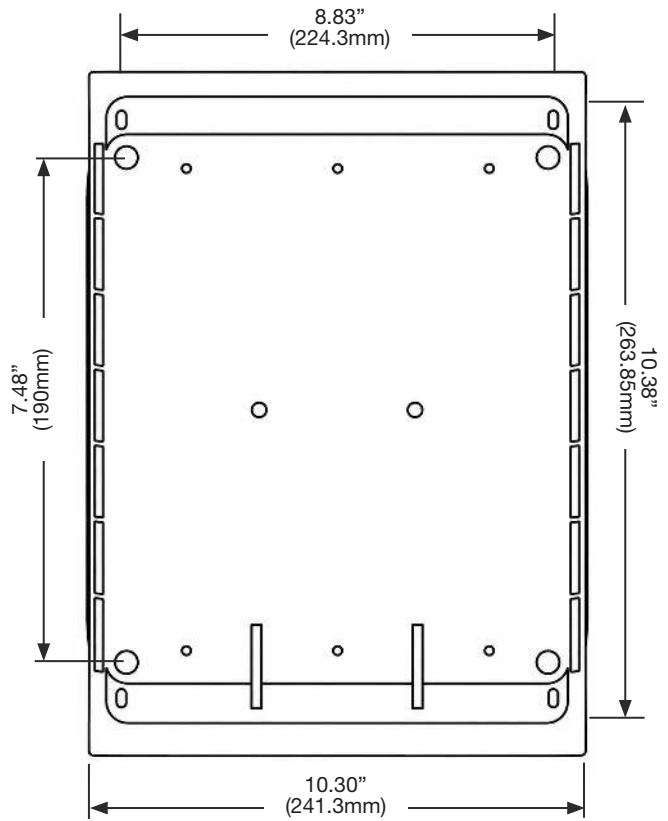
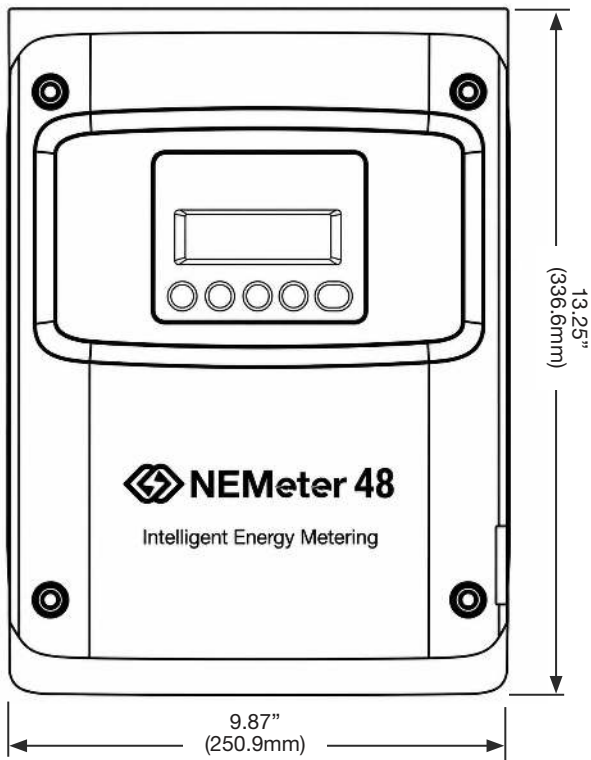
NEMeter 48 ANATOMY



PANEL FEATURES

- | | |
|-------------------|---------------------------|
| 1. CT Connections | 8. Phase Loss Alarm |
| 2. Pulse Input 1 | 9. Display |
| 3. Pulse Input 2 | 10. Navigation |
| 4. Ethernet | 11. Voltage Input 1 |
| 5. USB | 12. Voltage Input 2 |
| 6. 12V Out (2W) | 13. ABS Plastic Enclosure |
| 7. RS - 485 | |

NEMeter 48 | DIMENSIONS



TECHNICAL

SERVICE TYPE	Single Phase, Split Phase, Three Phase-Four Wire (WYE), Three Phase-Three Wire (Delta)
POWER	From L1 Phase to L2 Phase. 90-600VAC RMS CAT III 50/60Hz, 500mA AC Max. Use of 12 volt auxiliary output requires 100 VAC minimum input voltage.
AC PROTECTION	0.5A Fuse 200kA interrupt capacity
POWER OUT	Unregulated 12VDC output, 200 mA, self-resetting fuse.
VOLTAGE CHANNELS	90-346 Volts AC Line-to-Neutral, 600V Line-to-Line, CAT III. Two voltage reference inputs.
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 R6Coil CTs
MEASUREMENT TYPE	True RMS using high-speed digital signal processing (DSP) with continuous sampling
LINE FREQUENCY	50/60 Hz (45-70 Hz measurable range). Measurement taken L1-N.
WAVEFORM SAMPLING	1.8 kHz
PARAMETER UPDATE RATE	1 second
MEASUREMENTS	Volts, Amps, kW, kVAR, kVA, aPF, dPF, kW demand, kVA demand, Import (Received) kWh, Export (Delivered) kWh, Net kWh, Import (Received) kVAh, Export (Delivered) kVAh, Net kVAh, Import (Received) kVARh, Export (Delivered) kVARh, Net kVARh, THD, Theta, Frequency. All parameters for each phase and element total
ACCURACY	0.2% ANSI C12.20-2010 Class 0.2
RESOLUTION	Values in IEEE-754 single precision floating point format (32 bit).
DISPLAY	4-line display, tri-color backlight (PhaseChek™)
ALARM OUTPUT	Under Voltage (open collector- 30V DC Max.)
PULSE INPUTS**	Two inputs. 3.3V sourcing voltage (current limited) to customer dry contact pulse output. Max pulse rate 10 Hz (50 mSec minimum transition time).

MECHANICAL

WIRE CONNECTIONS	12-28 AWG 600 VAC, Voltage connection must be #14 AWG or larger & 600 VAC rated
MOUNTING	Panel Mount/Enclosure
HIGH VOLTAGE COVER	IP30. Available with NEM48 Enclosure & Plate Models
OPERATING TEMPERATURE*	-20° to 60°C (-4° to 140°F)**
HUMIDITY	5% to 95% non-condensing
ENCLOSURE	ABS Plastic, 94-V0 flammability rating. Connections: 1" EMT conduit
ENCLOSURE DIMENSIONS	(L) 33.7cm x (W) 25.1cm x (H) 8.0 cm (13.3" x 9.8" x 3.1")
MOUNTING PLATE DIMENSIONS	(L) 26.2cm x (W) 24.1cm x (H) 8.0 cm (10.3" x 9.5" x 3.1")

COMMUNICATIONS

HARDWARE	RS-485, Ethernet, and USB (For configuration only)
SUPPORTED PROTOCOLS	Modbus RTU, BACnet MS/TP, Modbus TCP or BACnet IP
MAX COMMUNICATION LENGTH	1200 with Data Range of 100K bits/second or less
COMMUNICATION RATE (BAUD)	Modbus: 9600, 19200, 38400, 57600, 76800, 115200 Baud BACnet: 9600, 19200, 38400, 76800
DATA BITS	8
PARITY	None, Even, Odd
STOP BIT	2, 1
TERMINATION	None provided

CERTIFICATIONS

UL RECOGNIZED (E186827)	Applies to mounting plate and circuit board only version. Conforms to UL Std 61010-1, 3rd Edition & IEC 61010-2-030 1st Edition
UL LISTED (E186827)	Applies to indoor enclosure version. Conforms to UL Std 61010-1, 3rd Edition & IEC 61010-2-030 1st Edition
CE	LVD (EN61010-1), EMC (EN61326-1), RoHS 2 (EN50581)

PRODUCT CONFIGURATOR

BRAND	CHANNEL	ENCLOSURE/MOUNTING	NETWORK	TOU
NE-METER (NEM)	3 12 24 48	Poly Enclosure (PE) Mounting Plate (MP) DIN RAIL (DN)	Blank Cloud Enabled (CE)	Blank (N) Yes (Y)

NEMETER VIEWPOINT SOFTWARE

OPERATING SYSTEM	Windows® 11, Windows® 10, Windows® 8, Windows® 7
COMMUNICATIONS	USB & Ethernet standard. One USB Port required on PC.
SECURITY	2 levels of PIN protection (Read/Write or Read-Only)

ORDERING INFORMATION

NEMETER MULTI-CHANNEL MONITORING

CATALOG NUMBER	DESCRIPTION
NEM-3-DN-CE	DIN Rail Mount + Display: 3-Channel Cloud enabled
NEM-3-DN-Y	DIN Rail Mount + Display: 3-Channel, TOU enabled
NEM-3-PE-CE	Wall Mount + Display: 3-Channel, Poly Enclosure Cloud enabled
NEM-12-PE-CE	Wall Mount + Display: 12-Channel, Poly Enclosure Cloud enabled
NEM-12-PE-Y	Case+Display: 12-Channel, Poly Enclosure, TOU enabled
NEM-12-MP	Mounting Plate + Display, 12-Channel
NEM-12-MP-Y	Mounting Plate +Display: 12-Channel, TOU enabled
NEM-24-PE-CE	Case+Display: 24-Channel, Poly Enclosure, Cloud enabled
NEM-24-MP	Mounting Plate + Display, 24-Channel
NEM-48-PE-CE	Case+Display: 48-Channel, Poly Enclosure Cloud enabled
NEM-48-MP	Mounting Plate + Display, 48-Channel
NEM-48-MP-CE	Mounting Plate + Display, 48-Channel, Cloud Enabled

COMPATIBLE CT OPTIONS*

CATALOG NUMBER	DESCRIPTION
DI-HG-10-20	20A, Hinged CT, 0.4" (10mm) window, 3m Leads
DI-HG-10-50	50A, Hinged CT, 0.4" (10mm) window, 3m Leads
DI-HG-25-100	100A, Hinged CT, 1.0" (25mm) window, 3m Leads
DI-HG-25-200	200A, Hinged CT, 1.0" (25mm) window, 3m Leads
DI-HG-36-400	400A, Hinged CT, 1.4" (36mm) window, 3m Leads
DI-SP-19-100-RG-C	100A, Split Core CT, 333mV, 0.75" (19MM) window, 3m Leads, Revenue Grade CTEP
DI-SP-51-1000	1000A, Split Core CT, 2" (51mm) window, 3m Leads
DI-SC-19-100-RG	100A, Solid Core CT, 0.75" (19mm) window, 3m Leads, Revenue Grade
DI-SC-25-200-RG	200A, Solid Core CT, 1.0" (25mm) window, 3m Leads, Revenue Grade
DI-SC-32-400-RG	400A, Solid Core CT, 1.25" (32mm) window, 3m Leads, Revenue Grade
DI-SC-15-100-RG	100A, Solid Core Mounting CT, 0.6" (15mm) window, 3m Leads, Revenue Grade
DI-SC-20-200-RG	200A, Solid Core Mounting CT, 0.78" (20mm) window, 3m Leads, Revenue Grade
DI-SC-35-400-RG	400A, Solid Core Mounting CT, 1.38" (35mm) window, 3m Leads, Revenue Grade
DI-RO-17-4000-3M	4000A, Rogowski Coil, 17" (43.2cm) length, 3m Leads
DI-RO-246-4000-3M	4000A, Rogowski Coil, 24" (60cm) length, 3m Leads
AE-SP-19-50-RG	50A, Split Core CT, 333mV, 0.75" (19MM) window, 2.5m Leads, Revenue Grade
AE-SP-19-70-RG	75A, Split Core CT, 333mV, 0.75" (19MM) window, 2.5m Leads, Revenue Grade
AE-SP-19-100-RG	100A, Split Core CT, 333mV, 0.75" (19MM) window, 2.5m Leads, Revenue Grade
AE-SP-19-150-RG	150A, Split Core CT, 333mV, 0.75" (19MM) window, 2.5m Leads, Revenue Grade
AE-SP-32-200-RG	200A, Split Core CT, 333mV, 1.25" (32MM) window, 2.5m Leads, Revenue Grade
AE-SP-32-250-RG	250A, Split Core CT, 333mV, 1.25" (32MM) window, 2.5m Leads, Revenue Grade
AE-SP-32-300-RG	300A, Split Core CT, 333mV, 1.25" (32MM) window, 2.5m Leads, Revenue Grade
AE-SP-32-400-RG	400A, Split Core CT, 333mV, 1.25" (32MM) window, 2.5m Leads, Revenue Grade
AE-SP-51-400-RG	400A, Split Core CT, 333mV, 2" (51MM) window, 2.5m Leads, Revenue Grade
AE-SP-51-600-RG	600A, Split Core CT, 333mV, 2" (51MM) window, 2.5m Leads, Revenue Grade
AE-SP-51-800-RG	800A, Split Core CT, 333mV, 2" (51MM) window, 2.5m Leads, Revenue Grade
AE-SP-80-1000-RG	1000A, Split Core CT, 333mV, 3.1"x3.5" (80X90MM) window, 2.5m Leads, Revenue Grade
AE-SP-80-1200-RG	1200A, Split Core CT, 333mV, 3.1"x3.5" (80X90MM) window, 2.5m Leads, Revenue Grade
AE-SP-105-1600-RG	1600A, Split Core CT, 333mV, 4.1"x6.1" (105X155MM) window, 2.5m Leads, Revenue Grade
AE-SP-105-2000-RG	2000A, Split Core CT, 333mV, 4.1"x6.1" (105X155MM) window, 2.5m Leads, Revenue Grade
AE-SP-105-2500-RG	2500A, Split Core CT, 333mV, 4.1"x6.1" (105X155MM) window, 2.5m Leads, Revenue Grade
AE-SP-130-3000-RG	3000A, Split Core CT, 333mV, 5.1"x7" (130X180MM) window, 2.5m Leads, Revenue Grade
AE-SP-130-4000-RG	4000A, Split Core CT, 333mV, 5.1"x7" (130X180MM) window, 2.5m Leads, Revenue Grade
AE-SC-93-800-RG	800A, Solid Core CT, 333mV, 3.66" (93MM) window, 2.5m Leads, Revenue Grade
AE-SC-42-400-RG	400A, Solid Core CT, 333mV, 1.65" (42MM) window, 2.5m Leads, Revenue Grade
AE-SC-30-200-RG	200A, Solid Core CT, 333mV, 1.20" (30MM) window, 2.5m Leads, Revenue Grade

WIRELESS COMMUNICATION OPTIONS

GPP5352	LTE CAT1 Industrial Router, Wi-Fi&I/O Option
GPP5353	LTE CAT M1 Industrial M2M Router w/ High Gain Antenna

*Other CT options in Hinged, Split-Core, Solid-Core, and Rogowski Coil available for a variety of applications.