

AcuPanel 9104/9104X

Pre-Wired Power & Energy Panel
Meter Datasheet

ACCUEnergy



DESCRIPTION

The AcuPanel 9104/9104X is a convenient, pre-configured meter enclosure that delivers streamlined meter deployment in OEM or retrofit projects. It is ideal for when installation inside an electrical distribution panel is unavailable, in harsh environments to safeguard instrumentation against the elements, or to limit the time and complexity of installation. Each AcuPanel undergoes rigorous quality testing to ensure years of dependable service.

FEATURES

- + Choose from a NEMA 3 rated industrial steel enclosure or NEMA 4X rated polycarbonate enclosure suitable for both indoor and outdoor use
- + The lockable, plug-and-play housing provides protection against unwanted tampering and the elements
- + Clean, factory pre-wiring for fast, reliable installation. All necessary fuses, shorting blocks, & terminal blocks are pre-installed and labeled.
- + Self-powered panel does not require a separate power supply
- + Wires can be run through pluggable, pre-cut holes
- + Simple grounding is included inside each enclosure
- + No control transformer needed
- + Compatible with the Acuvim II Series and Acuvim L Series meters

AcuPanel 9104/9104X Pre-Wired Power & Energy Panel Meter | Datasheet | 1

ACUPANEL SPECIFICATIONS

AcuPanel 9104X



AcuPanel 9104



Compatible Meters



Acuvim II



Acuvim L



Acuvim II



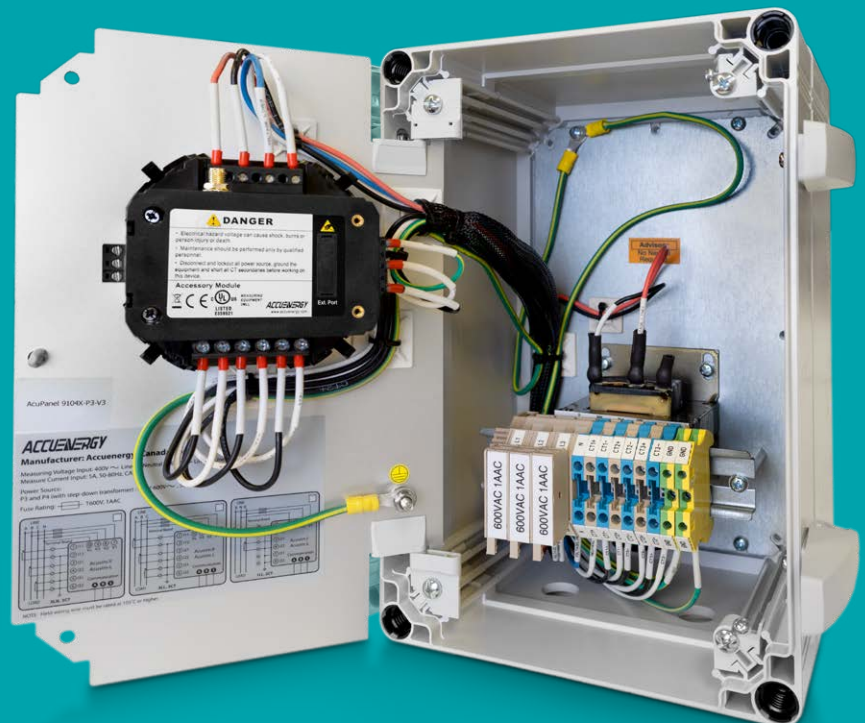
Acuvim L

Application	Indoor or outdoor installations that require exceptional environmental protection and weather resistance	Indoor installations that require rugged protection, but not weather resistance
Safety Certifications	UL508A, UL61010-1	UL508A, UL61010-1
NEMA Rating	NEMA 4X	NEMA 3 [†]
Material	Polycarbonate	Steel
Anti-Corrosive	•	
Dust Proof	•	•
Suitable for Indoor Use	•	•
Suitable for Outdoor Use	•	
Pre-Wired	•	•
Pre-Configured	•	•

[†] AcuPanel 9104 is NEMA 3 by default. To increase the rating to NEMA 4, add the 96-IP66 protective cover.

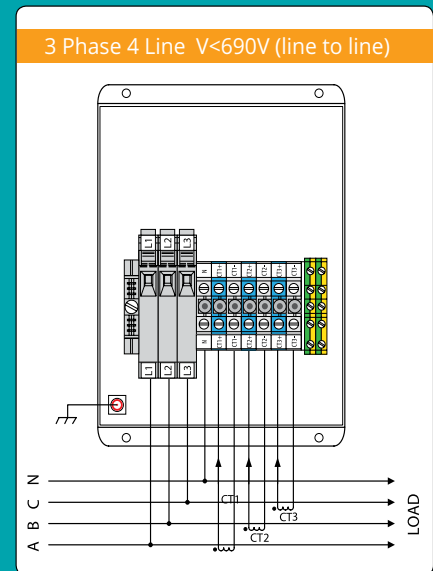
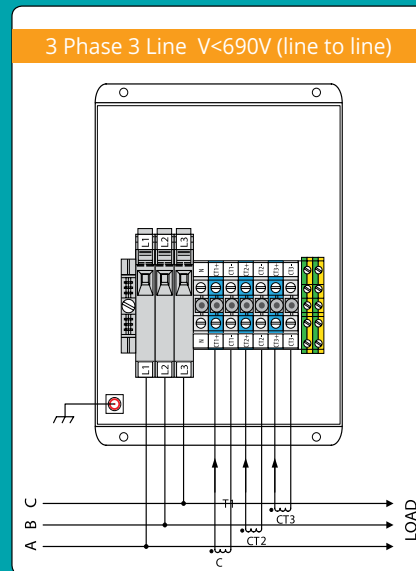
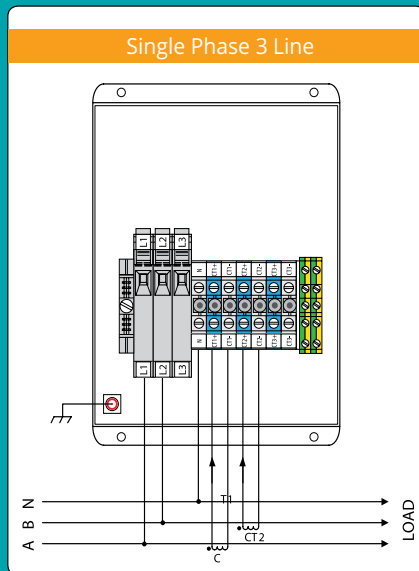
EACH STANDARD, PRE-WIRED ENCLOSURE INCLUDES:

- + Terminal blocks for current transformer input
- + Shorting blocks for current transformers
- + Terminal blocks for voltage inputs
- + Three industrial-grade fuses



WIRING DIAGRAMS

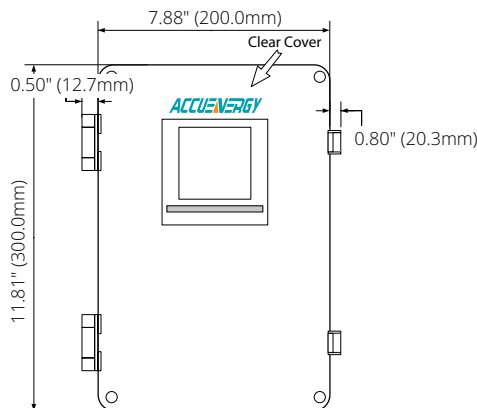
9104/9104X



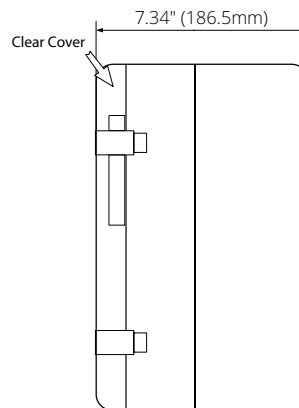
DIMENSIONS

AcuPanel 9104/9104X Pre-Wired Power & Energy Panel Meter | Datasheet | 3

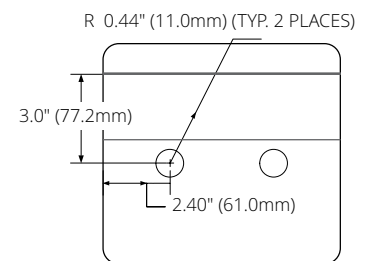
AcuPanel 9104X Waterproof Polycarbonate Panel



Front View

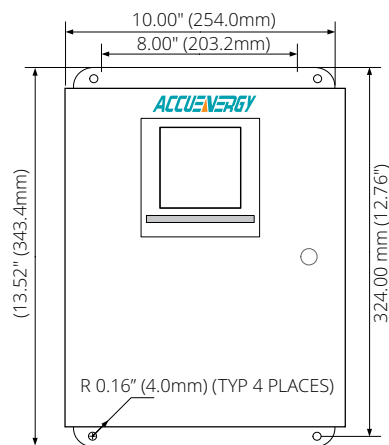


Side View

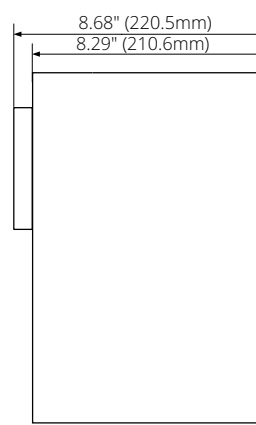


Bottom View

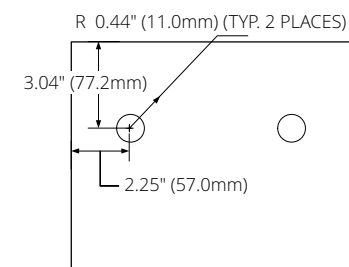
AcuPanel 9104 Steel Panel



FRONT VIEW



SIDE VIEW

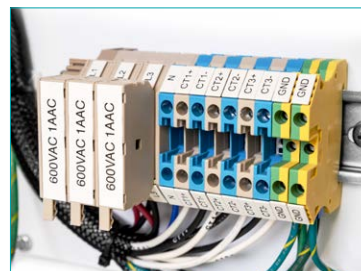


BOTTOM VIEW

CUSTOM OEM SOLUTIONS

Partner with Accuenergy to design a custom, OEM panel to suit any metering application.

- + Showcase your logo with custom branding
- + Adapt the panel to your application with specialized OEM components such as gateways, cellular modems, or power supplies
- + Suit your space or equipment needs with custom panel dimensions
- + Contact our energy metering specialists to help customize a panel solution for any unique application



ACCESSORIES

Protective Display Cover

The 96-IP66 Protective Display Cover is designed for Acuvim II, Acuvim L, or other 96mm by 96mm display panel meters. Crucial in harsh environments, it increases the IP environmental rating of a meter's display to IP66 or NEMA 4X. It can be used with the AcuPanel 9104 to increase environmental rating of the enclosure from NEMA 3 to NEMA 4.



[AcuPanel 9104/9104X Pre-Wired Power & Energy Panel Meter](#) | [Datasheet](#) | 4

ORDERING INFORMATION

Acuvim II Pre-Wired Panel

+	Pre-Wired Panel	- Meter Model	- Current Input	- Power Supply	- Communication Module Option*	- 2nd I/O Option*	- 3rd I/O Option*
	AcuPanel 9104: NEMA 4 [†] or NEMA 3 Indoor Steel Panel	IIR: Acuvim II with Data Logging	5A: 5A or 1A (Input Field Selectable)	P1V3: 100~415Vac, 50/60Hz, 100-300Vdc	0: None	0: None	0: None
	AcuPanel 9104X: NEMA 4X Indoor / Outdoor Waterproof Polycarbonate Panel	IIW: IIR + Waveform Capture and PQ Event Logging	mV: 333mV Input and Rogowski Coil (Input Field Selectable)	P2V3: 20-60Vdc	WEB2: Modbus-TCP/IP, BACnet-IP, SNMP V3, DNP 3.0 V2, IEC 61850 2nd Edition, SMTP, NTP, HTTP post, HTTPs post, FTP post, sFTP server, HTTPs webserver, dual RJ45, WiFi	IO1: 6DI, 2RO, 1 DI Power Supply	IO1: 6DI, 2RO, 1 DI Power Supply
			mA: 80mA / 100mA / 200mA (Input Field Selectable)	P3V3: 480Vac	WEB2-D: Modbus-TCP/IP, BACnet-IP, SNMP V3, DNP 3.0 V2, IEC 61850 2nd Edition, SMTP, NTP, HTTP post, HTTPs post, FTP post, sFTP server, HTTPs webserver, dual RJ45, Ethernet Port	IO2: 4DI, 2AO, 2DO	IO2: 4DI, 2AO, 2DO
				P4V3: 600Vac	PROFI: PROFIBUS-DP	IO3: 4DI, 2RO, 2AI	IO3: 4DI, 2RO, 2AI
					RS485: Second RS485 Port		
					IO1: 6DI, 2RO, 1 DI Power Supply		
					IO2: 4DI, 2AO, 2DO		
					IO3: 4DI, 2RO, 2AI		

Ordering Example: AcuPanel 9104X-IIR-5A-P1V3-WEB2-IO1-IO3

Acuvim L Pre-Wired Panel

+	Pre-Wired Panel	- Meter Model	- Current Input	- Power Supply	- Communication Module Option*	- 2nd I/O Option*	- 3rd I/O Option*
	AcuPanel 9104: NEMA 4 [†] or NEMA 3 Indoor Steel Panel	CL: General Meter	5A: 5A or 1A Nominal Current Input	P1V4: 100-415Vac, 50-60Hz, 100-300Vdc	0: None	0: None	0: None
	AcuPanel 9104X: NEMA 4X Indoor / Outdoor Waterproof Polycarbonate Panel	EL: CL + TOU and PQ parameters	mV: 333mV Input and Rogowski Coil (Input Field Selectable)	P2V4: 20-60Vdc	WEB2: Modbus-TCP/IP, BACnet-IP, SNMP V3, DNP 3.0 V2, IEC 61850 2nd Edition, SMTP, NTP, HTTP post, HTTPs post, FTP post, sFTP server, HTTPs webserver, dual RJ45, WiFi, Dual Ethernet Port	IO1: 6DI, 2RO, 1 DI Power Supply	IO1: 6DI, 2RO, 1 DI Power Supply
				P3V4: 480Vac	WEB2-D: Modbus-TCP/IP, BACnet-IP, SNMP V3, DNP 3.0 V2, IEC 61850 2nd Edition, SMTP, NTP, HTTP post, HTTPs post, FTP post, sFTP server, HTTPs webserver, dual RJ45, Ethernet Port	IO2: 4DI, 2AO, 2DO	IO2: 4DI, 2AO, 2DO
				P4V4: 600Vac	PROFI: PROFIBUS-DP	IO3: 4DI, 2RO, 2AI	IO3: 4DI, 2RO, 2AI
					RS485: Second RS485 Port		
					IO1: 6DI, 2RO, 1 DI Power Supply		
					IO2: 4DI, 2AO, 2DO		
					IO3: 4DI, 2RO, 2AI		

Ordering Example: AcuPanel 9104X-EL-5A-P1V4-WEB2-IO1-IO3

*No more than 2 of the same I/O modules may be attached to the meter (example: Two AXM-IO2). The same two I/O modules must be a different component number.

† AcuPanel 9104 is NEMA 3 by default. To increase the rating to NEMA 4, add the 96-IP66 protective cover.



Revision Date: March 2024 Version: 1.0.3
Specs Subject To Change Without Notice.

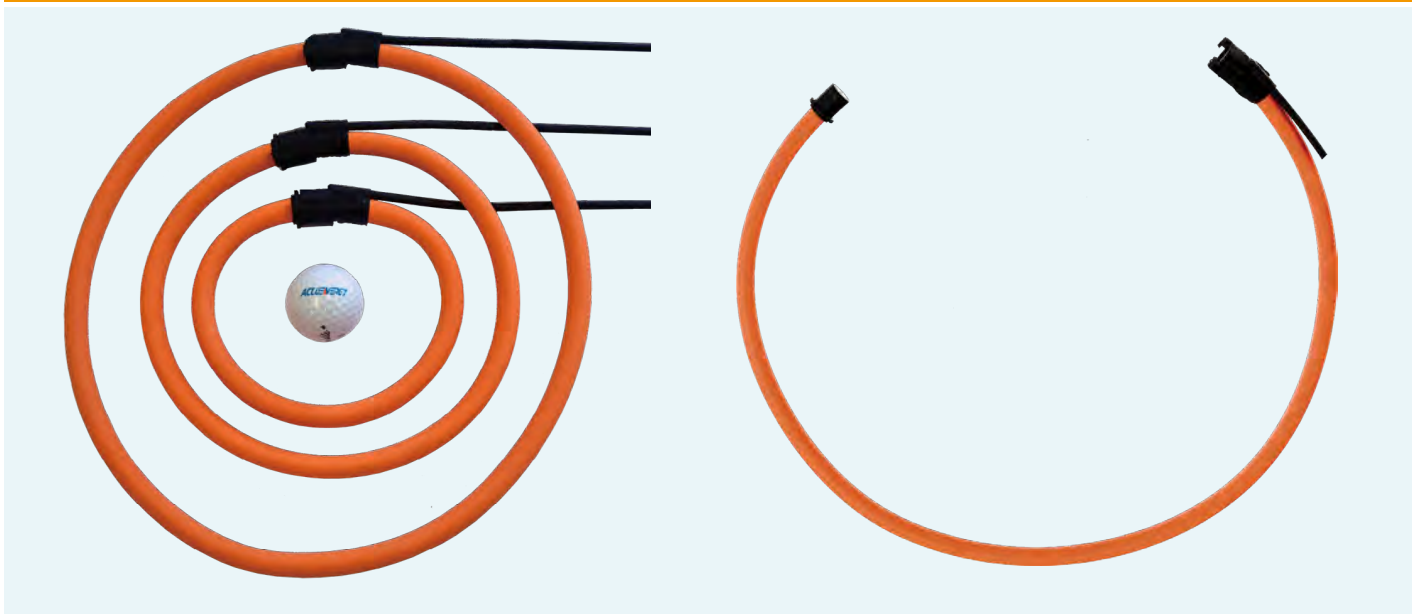
ACCUEVERGY



ISO9001 Certified

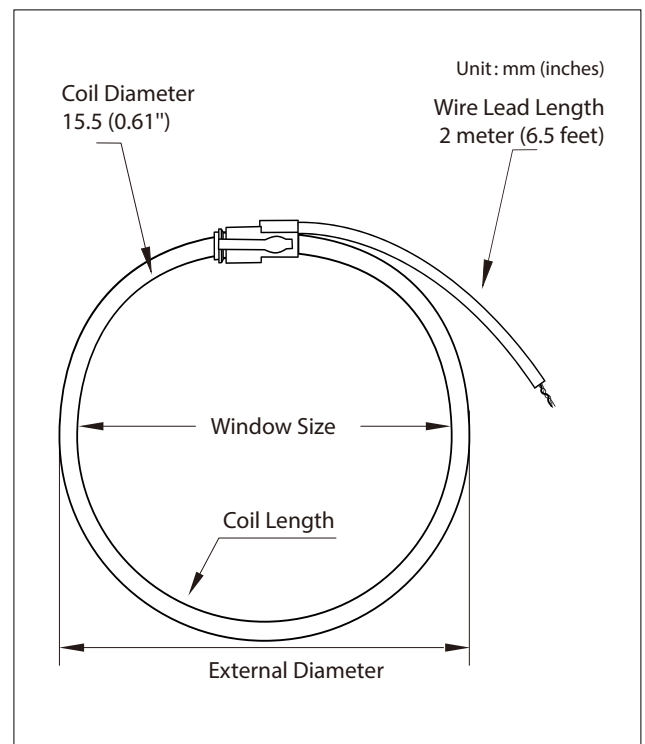
AcuPanel 9104/9104X Pre-Wired Power & Energy Panel Meter | Datasheet | 5

ROGOWSKI COIL CT



Accuenergy's Flexible Rogowski Coil is designed to use where regular solid or split core current transformers cannot fit, and ideal for power quality monitoring such as harmonics. Advantage including high accuracy, wide measurement and frequency range, and no additional integrator and power supply is needed.

SPECIFICATION	
Window Size	106mm (4.17"), 178mm (7.01"), 271mm (10.67"), 369mm (14.53")
Length of Coil	400mm (15.75"), 600mm (23.62"), 900mm (35.43"), 1200mm (47.24")
Current Range	5A - 50,000A
Frequency Range	20Hz - 5kHz
Accuracy	0.5%
Lead	White-Positive, Brown-Negative, Bare-shield; 26AWG
Polarity	Arrow towards load (current flow direction)
Operating Temperature	-20°C - 70°C
Temperature Drift	+/- 0.07%
Material	Orange thermoplastic rubber, flame retardant UL 94 V-0 rated
Dielectric Strength	7400Vac @ 50/60Hz for 1 minute
Over voltage category	1000V CAT III, 600V CATIV
Cable	1000V UL STYLE 20940; External diameter 5mm; Wires 2x 26AWG



DIMENSIONS

DIMENSIONS	RCT16	RCT24	RCT36	RCT47
Window Size	106 (4.17")	178 (7.01")	271 (10.67")	369 (14.53")
Coil Length	400 (15.75")	600 (23.62")	900 (35.43")	1200 (47.24")
External Diameter	143 (5.63")	207 (8.13")	302 (11.89")	398 (15.66")
Coil Diameter	15.5 (0.61")			

Unit: mm (inches)

MODEL	Output/1000A @ 50Hz	Output/1000A @ 60Hz
RCTxx-200	500mV	600mV
RCTxx-500	200mV	240mV
RCTxx-1000	100mV	120mV
RCTxx-2500	40mV	48mV
RCTxx-5000	20mV	24mV
RCTxx-10000	10mV	12mV
RCTxx-50000	2mV	2.4mV
RCTxx-Custom	Output any ratio of signal per your requirement.	

*"xx" denotes length of current transformer coil

APPLICATIONS

