AcuPanel 9104/9104X

Pre-Wired Power & Energy Panel Meter Datasheet



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, Acuvim IIBN, Acuvim L, and EV300 meters

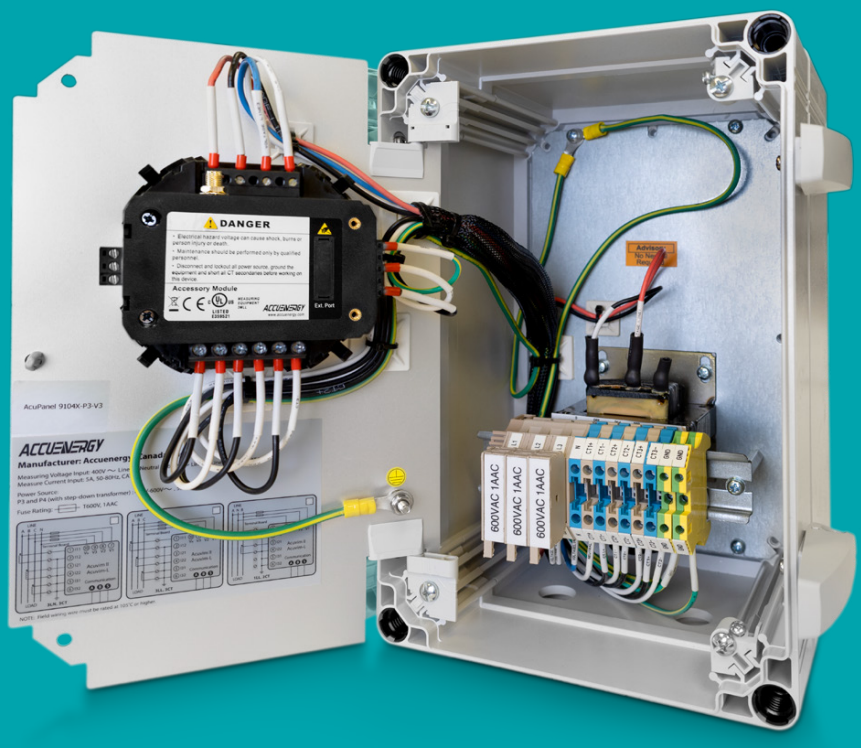
ACUPANEL SPECIFICATIONS

	AcuPanel 9104X	AcuPanel 9104
		
Compatible Meters	Acuvim II, Acuvim IIBN, Acuvim L, EV300	Acuvim II, Acuvim IIBN, Acuvim L, EV300
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-Corosive	•	
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:

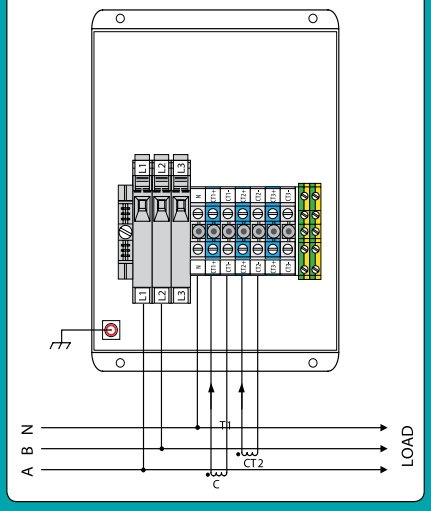
+ Terminal blocks for current transformer input
+ Shorting blocks for current transformers
+ Terminal blocks for voltage inputs
+ Three industrial-grade fuses



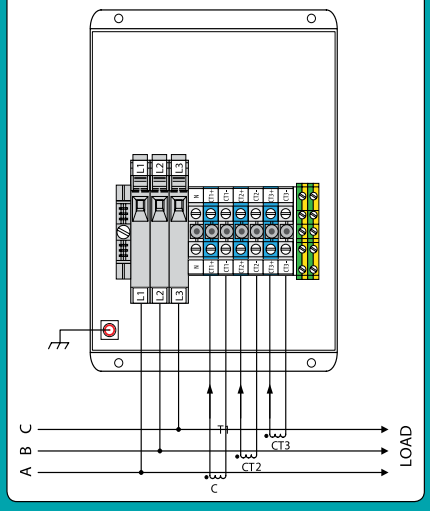
WIRING DIAGRAMS

9104/9104X

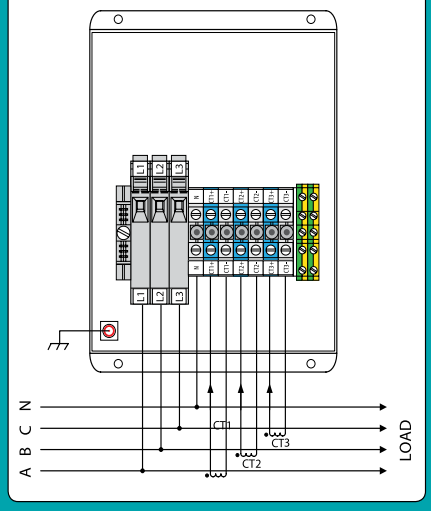
Single Phase 3 Line



3 Phase 3 Line V<690V (line to line)

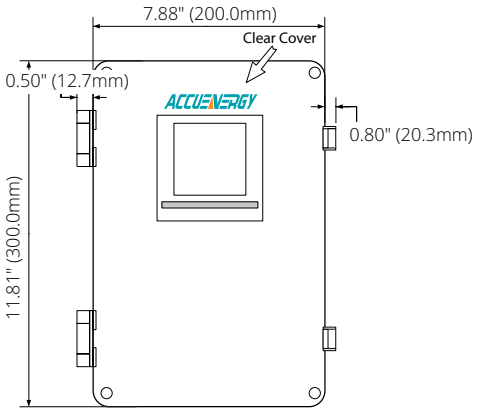


3 Phase 4 Line V<690V (line to line)

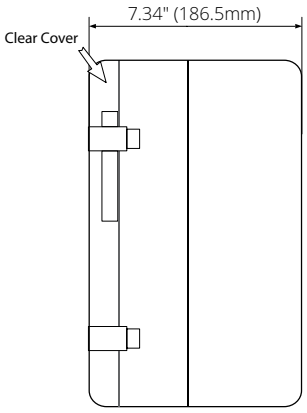


DIMENSIONS

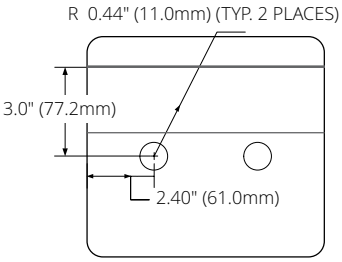
AcuPanel 9104X Waterproof Polycarbonate Panel



Front View

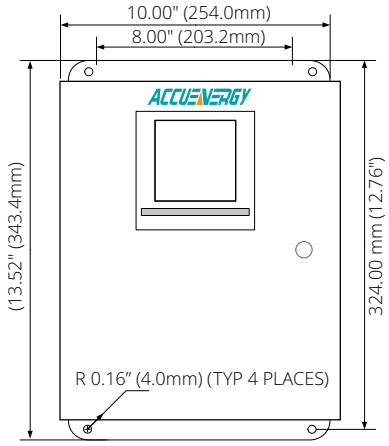


Side View

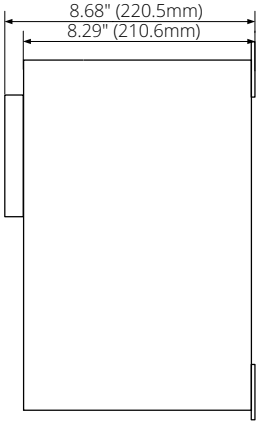


Bottom View

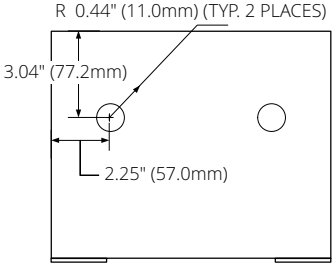
AcuPanel 9104 Steel Panel



Front View



Side View

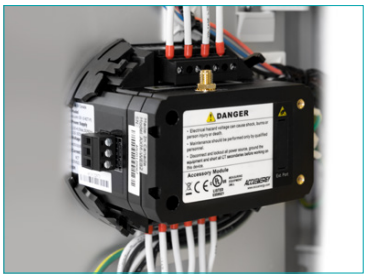


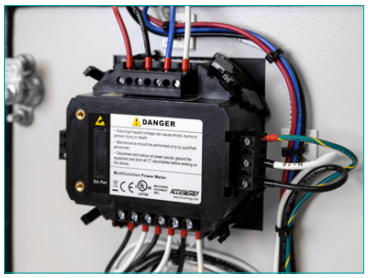
Bottom View

CUSTOM OEM SOLUTIONS

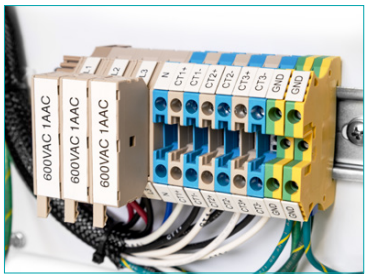
Partner with Accuenergy to design a custom, OEM panel to suit any metering application.

+ 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 IIBN, Acuvim L, EV300, 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.



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	**WEB-PUSH:** Modbus-TCP/IP, HTTPs Webserver, HTTP/HTTPs Post, FTP Post, SMTP, SNTP	**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

**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.

ORDERING INFORMATION

Acuvim IIBN Pre-Wired Panel

Pre-Wired Panel	Meter Model	Current Input	Power Supply
AcuPanel 9104: NEMA 4† or NEMA 3 Indoor Steel Panel	**IIBN:** Revenue Grade Multifunction Power Meter with BACnet-IP built-in	**5A:** 5A or 1A Nominal Current Input	**P1:** 100-415Vac, 100-300Vdc
AcuPanel 9104X: NEMA 4X Indoor /Outdoor Waterproof Polycarbonate Panel		**RCT:** Rogowski Coil CT Input	**P2:** 20-60Vdc
		333mV: 333mV Nominal CT Input	**P3:** 480Vac
		mA: 80mA, 100mA, or 200mA Nominal CT Input	**P4:** 600Vac

Ordering Example: **AcuPanel 9104X-IIBN-5A-P1**

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

Acuvim L Pre-Wired Panel

Pre-Wired Panel	Model	Current Input	Power Supply	Module Option*
AcuPanel 9104: NEMA 4† or NEMA 3 Indoor Steel Panel	**BL:** Power meter with built-in DO, no communication	**5A:** 5A or 1A Nominal Current Input	**P1V3:** 100-415Vac, 50-60Hz 100-300Vdc	**0:** None
AcuPanel 9104X: NEMA 4X Indoor / Outdoor Waterproof Polycarbonate Panel	**CL:** General Meter	**RCT:** Rogowski Coil CT Input	**P2V3:** 20-60Vdc	**L-WEB:** Modbus-TCP/IP, DNP 3.0 Over IP V2, BACnet-IP, SNMP V3, HTTP/HTTPs post, FTP post, SMTP, NTP, HTTPs webserver; 4GB Datalogging
	EL: CL + TOU and PQ parameters	**333mV:** 333mV Nominal CT Input	**P3V3:** 480Vac	**L-X1:** 4DI+2DO
			P4V3: 600Vac	**L-X2**: 4DI+2DO+Second RS485
				L-X3: PROFIBUS
				L-X4: 4DI+2DO+PROFIBUS
				L-X5: 4DI+2RO
				L-X6: 4DI+2RO+Second RS485

Ordering Example: **AcuPanel 9104X-EL-5A-P1V3-L-WEB**

**Note: Acuvim-BL does not support additional modules.*

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

EV300 Pre-Wired Panel

Pre-Wired Panel	Model	I/O Option	Power Supply
AcuPanel 9104: NEMA 4† or NEMA 3 Indoor Steel Panel	**EV387:** V, I, E + Modbus	**EO:** 2DI	**P1:** 100-415Vac, 100-300Vdc
AcuPanel 9104X: NEMA 4X Indoor / Outdoor Waterproof Polycarbonate Panel	**EV390:** Power Meter + Modbus	**E1:** 6DI + 2RO + PS	**P2:** 20-60Vdc
		E2: 6DI + 2DO + PS	**P3:** 480Vac
		E3: 6DI + 2DO + 2AO	**P4:** 600Vac
		E4: 6DI + 2RO + 2AO	

Ordering Example: **AcuPanel 9104X-EV390-E2-P1**

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

Accessories *(Optional)*	
IP66/NEMA4X:	Environmental Protection Cover
Ordering Example:	**IP66/NEMA4X**

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Specs Subject To Change Without Notice.

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