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

















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	•	•

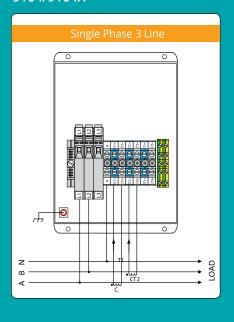
[†] AcuPanel 9104 is NEMA 3 by default. To increase the rating to NEMA 4, add the 96-IP66 protective cover.

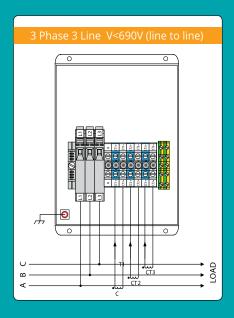
EACH STANDARD, PRE-WIRED ENCLOSURE INCLUDES:

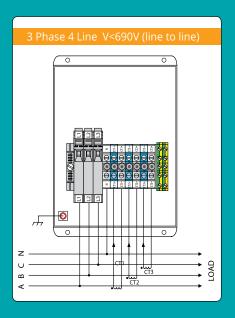
- + Terminal blocks for current transformer input
- + Shorting blocks for current transformers
- + Terminal blocks for voltage inputs
- + Three industrial-grade fuses



WIRING DIAGRAMS 9104/9104X

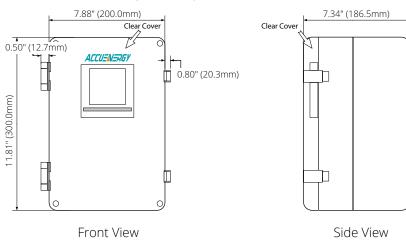


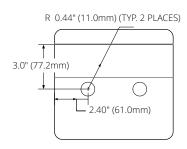




DIMENSIONS

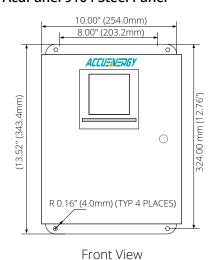
AcuPanel 9104X Waterproof Polycarbonate Panel

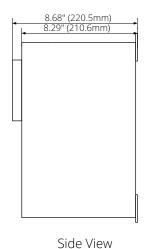


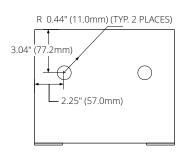


Bottom View

AcuPanel 9104 Steel Panel







Bottom View

VIEW



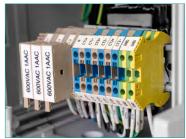
CUSTOM OEM SOLUTIONS

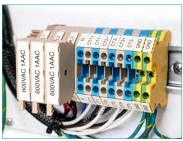
Partner with Accuenergy to design a custom, OEM panel to suit any metering application.

- + 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 AcuPanel 9104X: NEMA 4X Indoor / Outdoor Waterproof Polycarbonate Panel IIR: Acuvim II with Data Logging IIW: IIR + Waveform Capture and PQ Event Logging		5A: 5A or 1A (Input Field Selectable)	P1V3: 100~415Vac, 50/60Hz, 100-300Vdc	0: None	0: None	0: None
		I 9104X: Waveform Indoor / Capture and PQ Event Selectable) Waterproof Panel		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: A	AcuPanel 9104X-II	R-5A-P1V3-WEB2-IO)1-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 Evample: Acupanal 0104	V HDN EA D1			

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

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

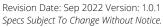
EV300 Pre-Wired Panel

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	

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









Accessories (Optional)

Ordering Example:

IP66/NEMA4X:

ISO9001 Certified



Environmental

Protection Cover

IP66/NEMA4X

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

 $^{^{\}dagger}$ AcuPanel 9104 is NEMA 3 by default. To increase the rating to NEMA 4, add the 96-IP66 protective cover.