Acuvim II Series

High Performance Meters

FEATURES

- Revenue Grade with Data Logging
- Waveform Capture
- Modbus, BACnet, SNMP
- Level 2 DNP3 and IEC61850 2nd Edition
- MV90 Support
- 8GB Datalogging and event storage
- COMtrade Waveform format
- Free Cloud Metering Data Storage + Analytics

Modbus BTL DNP3 MV90 COMPATIBLE WiFi

CE cULus TÜV CERT ISO9001 Certified

ACCUENERGY

Acuvim II Series High Performance Meters

- *100ms Refresh*
- *0.2 Class*
- *400 Parameters*
- *DNP 3.0*
- *BACnet*
- *8 GB Memory*
- *NEMA3/NEMA4X*
- *5 Year Warranty*

DESCRIPTION

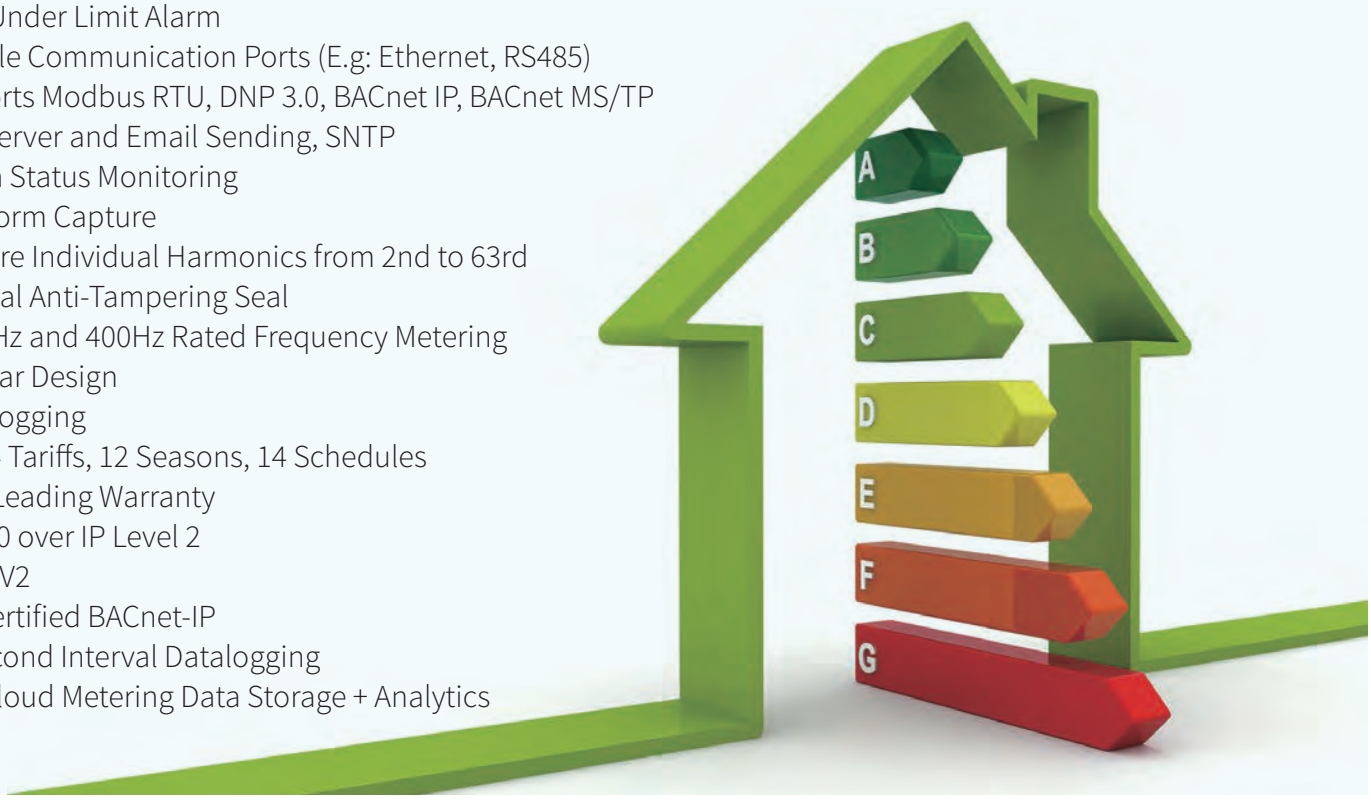
The Acuvim II series are high-end multifunction power and energy meters manufactured by Accuenergy. They are the ideal choice for the monitoring and controlling of power distribution systems.

The Acuvim II series may be used as data gathering devices for intelligent power distribution systems or plant automation systems. All monitored data is available via a digital RS485 communication port running Modbus RTU and DNP 3.0 protocols, additional communication options include: Modbus, Ethernet, Profibus DP, and BACnet.

With its flexible, modular I/O and communication options, the Acuvim II series is the most versatile and cost-effective metering solution on the market.

Top quality components are meticulously engineered into a line of products offering best-in-class capability that exceeds the toughest standards and ratings.

- 100ms Refresh, True-RMS Measuring Parameter
- ANSI C12.20 (0.2 Class) and IEC 62053-22 (0.2S Class)
- 16 MB Onboard Memory
- Power Quality Analysis
- Over/Under Limit Alarm
- Multiple Communication Ports (E.g: Ethernet, RS485)
- Supports Modbus RTU, DNP 3.0, BACnet IP, BACnet MS/TP
- Web Server and Email Sending, SNTP
- Switch Status Monitoring
- Waveform Capture
- Measure Individual Harmonics from 2nd to 63rd
- Physical Anti-Tampering Seal
- 50/60Hz and 400Hz Rated Frequency Metering
- Modular Design
- Data Logging
- TOU, 4 Tariffs, 12 Seasons, 14 Schedules
- Class Leading Warranty
- DNP3.0 over IP Level 2
- SNMP V2
- BTL Certified BACnet-IP
- 15-Second Interval Datalogging
- Free Cloud Metering Data Storage + Analytics



APPLICATIONS

Submeters for high performance monitoring and analysis, system integration & speciality applications.

- Metering of Distribution Feeders, Transformers, Generators, Capacitor Banks and Motors
- Medium and Low Voltage Systems
- Commercial, Industrial, Utility
- Power Quality Analysis
- Data Logging

FEATURES

Metering

- Voltage V1, V2, V3, Vlnavg, V12, V23, V31, Vllavg
- Current I1, I2, I3, In, Iavg
- Power P1, P2, P3, Psum
- Reactive Power Q1, Q2, Q3, Qsum
- Apparent Power S1, S2, S3, Ssum
- Frequency F
- Power Factor PF1, PF2, PF3, PF
- Energy Ep_imp, Ep_exp, Ep_total, Ep_net, Epa_imp, Epa_exp, Epb_imp_Epb_exp, Epc_imp, Epc_exp
- Reactive Energy Eq_imp, Eq_exp, Eq_total, Eq_net, Eqa_imp, Eqa_exp, Eqb_imp, Eqb_exp, Eqc_imp, Eqc_exp
- Apparent Energy Es, Esa, Esb, Esc
- Demand Dmd_P, Dmd_Q, Dmd_S, Dmd_I1, Dmd_I2, Dmd_I3
- Load Features
- Four Quadrant Powers

Monitoring

- Power Quality
- Voltage Harmonics 2nd to 63rd and THD
- Current Harmonics 2nd to 63rd and THD
- 400Hz type,only support 2nd to 15th
- Voltage Crest Factor
- THFF (TIF)
- Current K Factor
- Voltage Unbalance Factor U_unbl
- Current Unbalance Factor I_unbl
- Max/Min Statistics with Time Stamps

Alarms

Limits can be set for up to 16 indicated parameters and can be set with a specified time interval. If any input of the indicated parameters is over or under its setting limit and persists over the specified time interval, the event will be recorded with time stamps and trigger the Alarm DO output. The 16 indicated parameters can be selected from any of the 80 parameters available.

I/O Option Module

The E-module® technique was adopted for its flexibility and easy expansion of the I/O function of Acuvim II. A maximum of 3 modules can be used for one meter. Digital input, digital output, pulse output, relay output, analog input and analog output are provided by I/O option module.

Anti-tampering Seal

Users can physically seal the meter similar to a utility meter in order to provide anti-tampering protection. All metrological programming and user-defined parameters are protected with a physical seal.

High Frequency Metering

Designed for use with 400Hz aircraft systems Acuvim II series power meters effectively monitors any airborne system.

MULTI-PLATFORM ACCESS

Built-in web server provides computer, tablet and smartphone access.

Data Logging

Acuvim IIR/IIE/IIW offers 3 assignable historical logs where the majority of the metering parameters can be recorded. The onboard memory is up to 8 MB and each log size is adjustable. A real time clock allows for any logged events to be accurately time stamped.

With AXM-WEB2 module added, the memory size expands to industry-leading 8GB memory with 1-second interval datalogging.

Time of Use

Users can assign up to 4 different tariffs (sharp, peak, valley and normal) to different time periods within a day according to the billing requirements. The Acuvim IIE meter will calculate and accumulate energy to different tariffs according to the meter's internal clock timing and TOU settings.

Waveform Capture

Acuvim IIW can record 100 groups of voltage and current waveforms. It provides the waveform record of 10 cycles before and after the triggering point. It also supports a settable triggering condition.

COMtrade wavefrom file format is available from waveform capture.

Power Quality Event Logging

When a power quality event happens, such as voltage sag and swell, etc., Acuvim IIW will record the timestamp and the triggering condition of the event. It can save up to 50, 000 power quality events.

Automatic Frequency adaptation

Rated frequency is adjusted automatically to local frequency such as 50Hz or 60Hz. The same meter can be used in countries with different electrical frequencies.

Flexible Current Input

Compatible with different current transformers such as 5A, 1A, 80mA, 100mA, 200mA, 333mV output CT and Rogowski coil all available from Accuenergy.

Communication

- Modbus RTU Protocol via RS485
- DNP3 Level 2 over IP
- IEC 61850
- Ethernet (Modbus TCP, HTTP, SMTP, SNTP, HTTPs Post, FTP)
- Profibus DP
- BACnet IP, BACnet MS/TP
- Dual RS485 Communication Ports
- Wi-Fi and Ethernet dual communication (Modbus TCP, HTTP, SMTP, SNTP, HTTPs Post, FTP
- Mesh wireless slave module 868Hz or 900Hz

Display

- Clear and Large Character LCD Screen Display with White Backlight
- Wide Environmental Temperature Endurance
- Display Load Percentage, 4 Quadrant Powers, and Load Nature

Outline

Small Size 96×96 DIN or 4'' ANSI Round

FUNCTION LIST

● Function; ⊙ Option; Blank NA

CATEGORY		ITEM	PARAMETERS	Acuvim II	Acuvim IIR	Acuvim IIE	Acuvim IIW
METERING	REAL TIME METERING	Phase Voltage	V1, V2, V3, Vlnavg	●	●	●	●
		Line Voltage	V12, V23, V31, Vllavg	●	●	●	●
		Current	I1, I2, I3, In, Iavg	●	●	●	●
		Power	P1, P2, P3, Psum	●	●	●	●
		Reactive Power	Q1, Q2, Q3, Qsum	●	●	●	●
		Apparent Power	S1, S2, S3, Ssum	●	●	●	●
		Power Factor	PF1, PF2, PF3, PF	●	●	●	●
		Frequency	F	●	●	●	●
		Load Features	Load Features	●	●	●	●
		Four Quadrant Powers	Four Quadrant Powers	●	●	●	●
	ENERGY & DEMAND	Energy	Ep_imp, Ep_exp, Ep_total, Ep_net, Epa_imp, Epa_exp, Epb_imp, Epb_exp, Epc_imp, Epc_exp	●	●	●	●
		Reactive Energy	Eq_imp, Eq_exp, Eq_total, Eq_net, Eqa_imp, Eqa_exp, Eqb_imp, Eqb_exp, Eqc_imp, Eqc_exp	●	●	●	●
		Apparent Energy	Es, Esa, Esb, Esc	●	●	●	●
		Demand	Dmd_P, Dmd_Q, Dmd_S, Dmd_I1, Dmd_I2, Dmd_I3	●	●	●	●
TOU	TIME OF USE	Energy/max demand	TOU, 4 Tariffs, 12 Seasons, 14 Schedules			●	
	DAYLIGHT SAVING TIME	Two Adjustable Formats	Month/Day/Hour/Minute Month/Week/First few weeks/Hour/Minute			●	
MONITORING	WAVEFORM CAPTURE	Voltage and Current Waveform	Trigger, Manual, DI change, Sag/Dips, Swell, Over Current				●
	POWER QUALITY	Voltage Unbalance Factor	U_unbl	●	●	●	●
		Current Unbalance Factor	I_unbl	●	●	●	●
		Voltage THD	THD_V1,THD_V2,THD_V3, THD_Vavg	●	●	●	●
		Current THD	THD_I1, THD_I2, THD_I, THD_Iavg	●	●	●	●
		Individual Harmonics	Harmonics 2^{nd} to 63^{rd} (50H or 60Hz) Harmonics 2^{nd} to 15^{th} (400Hz)	●	●	●	●
		Voltage Crest Factor	Crest Factor	●	●	●	●
		TIF	THFF	●	●	●	●
		Current K factor	K Factor	●	●	●	●
	STATISTICS	MAX with Time Stamp MIN with Time Stamp	Each phase of V & I; Total of P, Q, S, PF & F; Demand of I1, I2, I3, P, Q&S; Each phase THD of V & I; Unbalance factor of V & I	●	●	●	●
OTHERS	ALARM	Over/Under Limit Alarm	V, I, P, Q, S, PF, V_THD & I_THD Each Phase and Total or Average; Unbalance Factor of V & I; Load Type; Analog Input of Each Channel; Demand of I1, I2, I3, P, Q&S; Reverse phase sequence; DI1~DI28	●	●	●	●
	POWER QUALITY EVENT LOGGING	Sag/Dips, Swell	Voltage				●
	DATA LOGGING	Data Logging 1 Data Logging 2 Data Logging 3	F, V1/2/3/lnavg, V12/23/13/lavg, I1/2/3/n/avg, P1/2/3/sum, Q1/2/3/sum, S1/2/3/sum, PF1/2/3, PF, U_unbl, I_unbl, Load Type, Ep_imp, Ep_exp, Ep_total, Ep_net, Eq_imp, Eq_exp, Eq_total, Eq_net, Es, Epa_imp, Epa_exp, Epb_imp,Epb_exp, Epc_imp, Epc_exp, Eqa_imp, Eqa_exp, Eqb_imp, Eqb_exp, Eqc_imp, Eqc_exp, Esa, Esb, Esc, THD_V1/2/3/avg, THD_I1/2/3/avg, Harmonics 2^{nd} to 63^{rd}, Crest Factor, THFF, K Factor, Sequence and Phase Angles, DI Counter, AI, AO, Dmd P/Q/S, Dmd I1/2/3			●	●
	ONBOARD MEMORY SIZE	Memory	Bytes	—	8MB	8MB	16MB
			With AXM-WEB-PUSH 4GB on all 4 models	●	●	●	●
			With AXM-WEB2, 8GB on all 4 models	●	●	●	●
	COMMUNICATION	RS485 Port, Half Duplex, Optical Isolated	Modbus®-RTU Protocol	●	●	●	●
	TIME	Real Time Clock	Year, Month, Date, Hour, Minute, Second	●	●	●	●

CATEGORY		ITEM	PARAMETERS	Acuvim II	Acuvim IIR	Acuvim IIE	Acuvim IIW
OPTION MODULE	I/O OPTION	Switch Status (DI)	Digital Input (Wet)	⊙	⊙	⊙	⊙
		Power Supply for DI	24 Vdc	⊙	⊙	⊙	⊙
		Relay Output (RO)	NO, Form A	⊙	⊙	⊙	⊙
		Digital Output (DO)	Photo-MOS	⊙	⊙	⊙	⊙
		Pulse Output (PO)	By Using DO	⊙	⊙	⊙	⊙
		Analog Input (AI)	0(4)~20mA, 0(1)~5V	⊙	⊙	⊙	⊙
		Analog Output (AO)	0(4)~20mA, 0(1)~5V	⊙	⊙	⊙	⊙
	COMMUNICATION	Ethernet	10M/100M, Modbus-TCP, HTTP Webpage, Email	⊙	⊙	⊙	⊙
		Profibus-DP	Profibus-DP/V0	⊙	⊙	⊙	⊙
		BACnet	IP or MS/TP	⊙	⊙	⊙	⊙
		RS485 Module	Additional Modbus RTU	⊙	⊙	⊙	⊙
		DNP 3.0 over IP		⊙	⊙	⊙	⊙
		IEC 61850 2nd Edition		⊙	⊙	⊙	⊙
	400Hz TYPE	Only support full-wave energy, support 2^{nd}~15^{th} individual harmonics		⊙	⊙	⊙	

Digital/Analog I/O

Integrate data to/from other devices with field expandable plug-in I/O modules

AXM-IO1	AXM-IO2	AXM-IO3
		
6x digital inputs 24Vdc power for digital inputs 2x relay outputs	4x digital inputs 2x digital outputs 2x analog outputs	4x digital inputs 2x relay outputs 2x analog inputs

Communications Protocols

A standard RS-485 port and our AXM line of plug-in expansions modules support a wide array of protocols.

	Standard	AXM-WEB2	AXM-WEB PUSH	AXM-BMS	AXM-BIP	AXM-PROFI	AXM-RS485	AXM-MESH
MODBUS-RTU	•						•	
DNP 3.0 Over IP		•	•					
IEC 61850		•						
MODBUS-TCP		•	•					
HTTP/HTTPs Webserver		•	•		•			
SMTP Email		•	•					
SNMP V3		•	•					
HTTP/HTTPs Push		•	•					
FTP Post		•	•					
sFTP Server		•	•					
Datalogging		8GB	4GB					
BACnet-MS/TP				•				
BACnet-IP		•			•			
PROFIBUS						•		
WiFi		•						•
Dual RJ45 Ports		•						

SPECIFICATIONS

METERING				
Parameters		Accuracy	Resolution	Range
Voltage		0.2%	0.1V	10V~1000kV
Current		0.2%	0.1mA	5mA~50000A
Power		0.2%	1W	-9999MW~9999MW
Reactive Power		0.2%	1var	-9999Mvar~9999Mvar
Apparent Power		0.2%	1VA	0~9999MVA
Power Demand		0.2%	1W	-9999MW~9999MW
Reactive Power Demand		0.2%	1var	-9999Mvar~9999Mvar
Apparent Power Demand		0.2%	1VA	0~9999MVA
Power Factor		0.2%	0.001	-1.000~1.000
Frequency		0.02%	0.01Hz	45.00~65.00Hz (50 or 60Hz type) 300.00Hz~500.00Hz (400Hz type)
Energy	Primary	0.2%	0.1kWh	0-99999999.9kWh
	Secondary	0.2%	0.001kWh	0-999999.999kWh
Reactive Energy	Primary	0.2%	0.1kvarh	0-99999999.9kvarh
	Secondary	0.2%	0.001kvarh	0-999999.999kvarh
Apparent Energy	Primary	0.2%	0.1kVAh	0-99999999.9kVAh
	Secondary	0.2%	0.001kVAh	0-999999.999kVAh
Harmonics		1.0%	0.1%	
Phase Angle		2.0%	0.1°	0.0°~359.9°
Unbalance Factor		2.0%	0.1%	0.0%~100.0%
Running Time			0.01h	0~9999999.99h

INPUT

Current Inputs (Each Channel)

Nominal Current	①5A, ②1A, ③1A(333mV), ④1A(100mV Rope-CT), ⑤1A(80mA/100mA/200mA)
Metering Range	①0~10A, ②0~2A, ③0~1.2A,④0~1.2A, ⑤0~1.2A
Pickup Current	①5mA, ②1mA, ③5mA, ④5mA, ⑤5mA,
Withstand	20Arms Continuous, 0.1% of Nominal 100Arms for 1 second, Non-Recurring
Burden	0.05VA (Typical) @ 5Arms
Accuracy	0.2% Full Scale

Voltage Inputs (Each Channel)

Nominal Full Scale	400Vac L-N, 690Vac L-L (+20%)
Withstand	1500Vac Continuous 2500Vac, 50/60Hz for 1 Minute
Input Impedance	2Mohm per Phase
Metering Frequency	45Hz~65Hz, 300Hz ~ 500Hz
Pickup Voltage	10Vac
Accuracy	0.2% Full Scale

Energy Accuracy

Active	Class 0.2s (According to IEC 62053-22) Class 0.2s (According to ANSI C12.20)
Reactive	Class 2 (According to IEC 62053-23)

Harmonic Resolution

Metered Value	63rd Harmonic (50Hz or 60Hz type) 15 th Harmonic (400Hz type)

COMMUNICATION

RS-485 (Standard)
MODBUS® RTU
2 Wire Shielded Twisted Pair Cable Connection
Baud Rate:1200~38400 bps

The Second RS-485 Port (Optional)
(The Same as RS-485 Standard Contents)
Baud Rate: 4800~38400 bps

Ethernet (Optional)
10M/100M BaseT
MODBUS® TCP/IP
DNP 3.0 Over IP Level 2
IEC 61850 2nd Edition
SNMP V3
BACnet-IP
HTTP/HTTPs Webserver
HTTP/HTTPs, FTP data post
SMTP
NTP

PROFIBUS (Optional)
PROFIBUS-DP/V0 Protocol
Work as PROFIBUS Slave, Baud Rate Adaptive, up to 12M
Model 1 : Input Bytes:32,Output Bytes:32
Model 2: Input Bytes :64,Output Bytes:2
PROFIBUS Standard According to EN 50170 Vol.2

BACnet(Optional)
BACnet IP, BACnet MS/TP

STANDARD COMPLIANCE

Measurement Standard	IEC 62053-22; ANSI C12.20
Environmental Standard	IEC 60068-2
Safety Standard	IEC 61010-1, UL 61010-1, IEC 61557-12
EMC Standard	IEC 61000-4/-2-3-4-5-6-8-11, CISPR 22, IEC 61000-3-2, IEC 61000-6-2/4
Outlines Standard	DIN 43700, ANSI C39.1

I/O OPTION

Digital Input

Input Voltage Range	20~160 Vac/dc
Input Current (Max)	2mA
Start Voltage	15V
Stop Voltage	5V
Pulse Frequency (Max)	100Hz, 50% Duty Ratio (5ms ON and 5ms OFF)
SOE Resolution	2ms

Digital Output (DO) (Photo-MOS)

Voltage Range	0~250Vac/dc
Load Current	100mA (Max)
Output Frequency	25Hz, 50% Duty Ratio (20ms ON, 20ms OFF)
Isolation Voltage	2500Vac

Relay Output (RO)

Switching Voltage (Max)	250Vac, 30Vdc
Load Current	5A(R), 2A(L)
Set Time	10ms (Max)
Contact Resistance	30mΩ (Max)
Isolation Voltage	2500Vac
Mechanical Life	$1.5x10^7$

Analog Output (AO)

Output Range	0~5V/1~5V, 0~20mA/4~20mA (Optional)
Accuracy	0.5%
Temperature Drift	50ppm/°C Typical
Isolation Voltage	500Vdc
Open Circuit Voltage	15V

Analog Input (AI)

Input Range	0~5V/1~5V, 0~20mA/4~20mA (Optional)
Accuracy	0.2%
Temperature Drift	50ppm/°C Typical
Isolation Voltage	500Vdc

Power Supply for DI (24Vdc)

Output Voltage	24Vdc
Output Current	42mA
Load (Max)	21 DIs

CONTROL POWER

Universal	AC or DC

AC/DC Control Power

Operating Range	100~415Vac, 50/60Hz; 100~300Vdc
Burden	5W
Frequency	50/60Hz
Withstand	3250Vac, 50/60Hz for 1 minute

Installation Category III (Distribution)

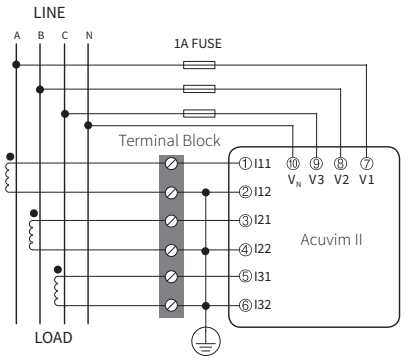
Low Voltage DC Control Power (Optional)

Operating Range	20~60Vdc
Burden	5W

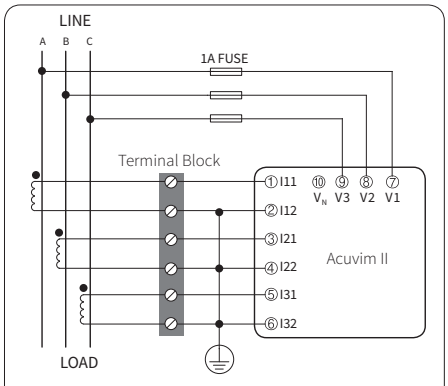
OPERATING ENVIRONMENT

Operation Temperature	- 25°C to 70°C
Storage Temperature	- 40°C to 85°C
Relative Humidity	5% to 95% Non-Condensing

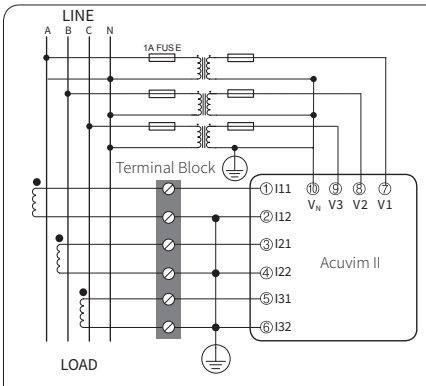
TYPICAL WIRING WITH 5A/1A CTs



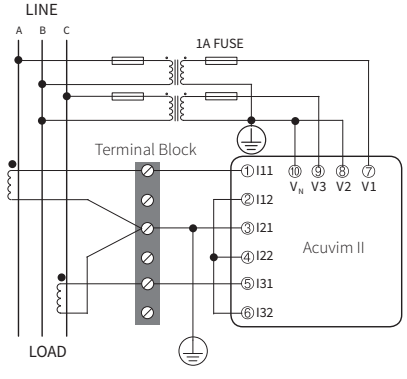
3 Phase 4 Wire (3LN, 3CT)



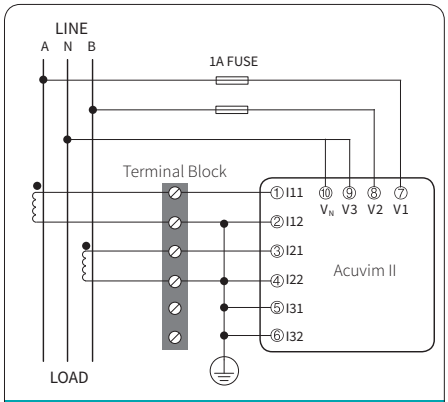
3 Phase 3 Wire (3LL, 3CT)



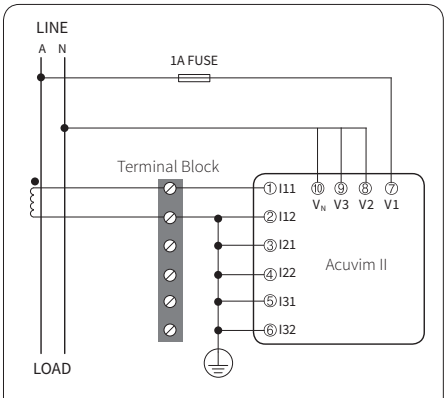
3 Phase 4 Wire with PT (3LN, 3CT)



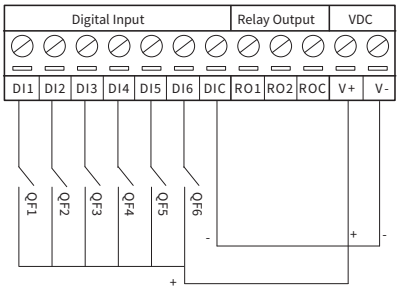
3 Phase 3 Wire with PT and 2 CT(2LL, 3CT)*



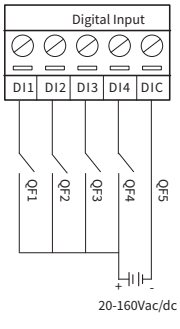
Single Phase 3 Wire (1LL, 2CT)



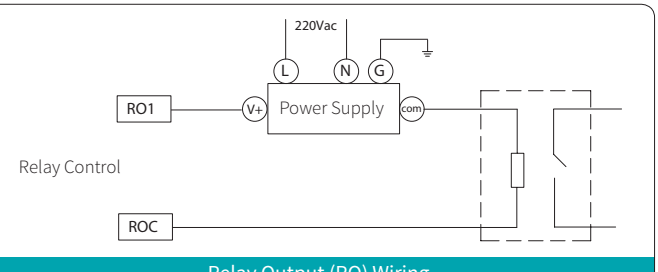
Single Phase 2 Wire (1LN, 1CT)



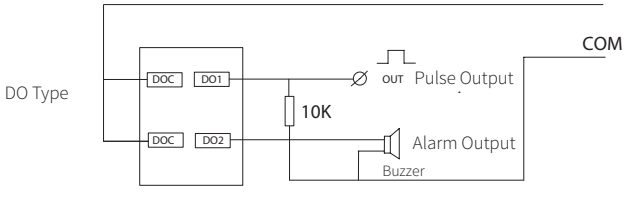
AXM-IO1



AXM-IO2/IO3



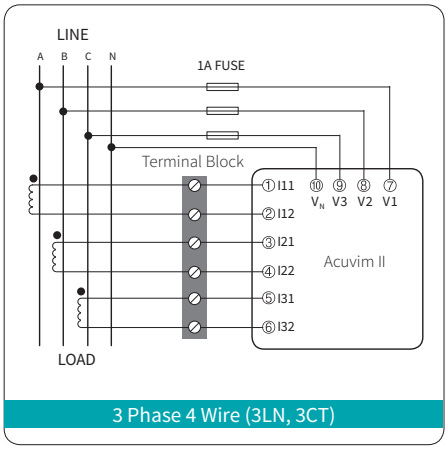
Relay Output (RO) Wiring



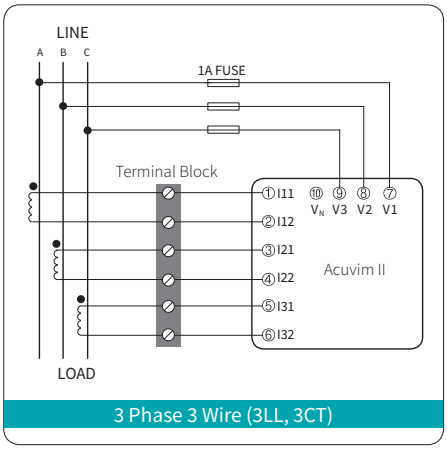
Energy Output (DO) Wiring

*Note: 2CT configuration is optional only in 3 Phase 3 Wire system.

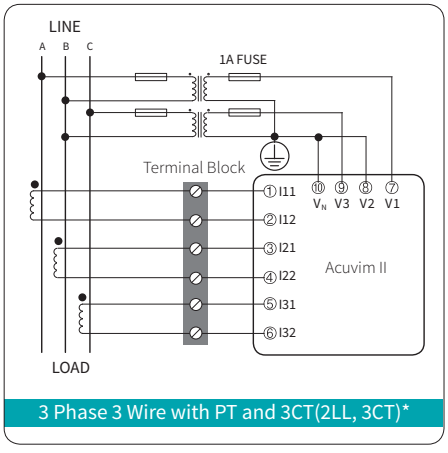
TYPICAL WIRING RCT/mV/mA CURRENT INPUT



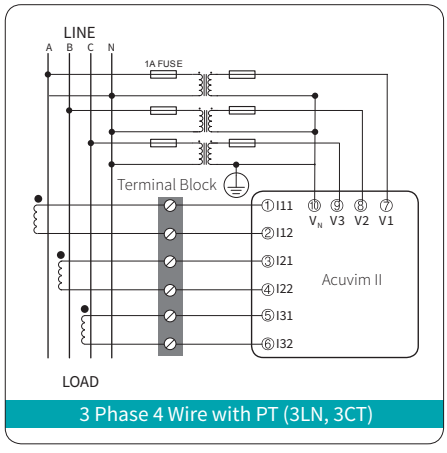
3 Phase 4 Wire (3LN, 3CT)



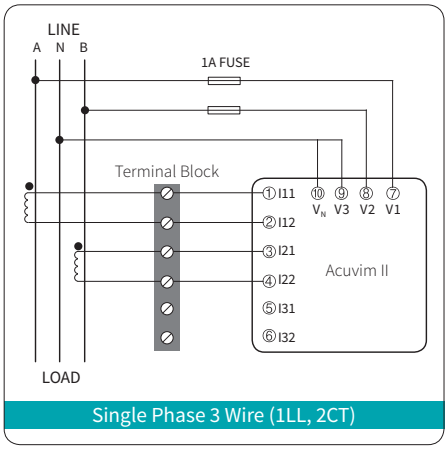
3 Phase 3 Wire (3LL, 3CT)



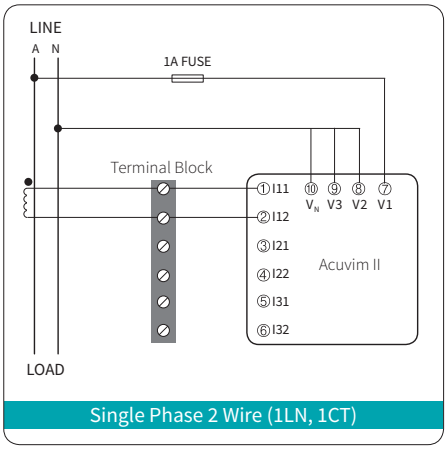
3 Phase 3 Wire with PT and 3CT(2LL, 3CT)*



3 Phase 4 Wire with PT (3LN, 3CT)



Single Phase 3 Wire (1LL, 2CT)

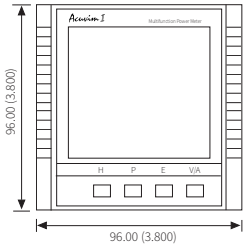


Single Phase 2 Wire (1LN, 1CT)

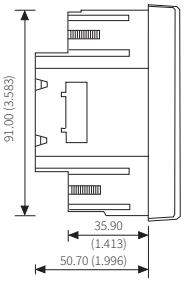
DIMENSIONS

Acuvim II Dimensions

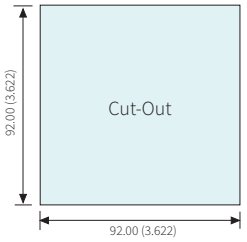
Unit: mm (inches)

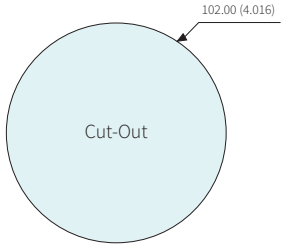


Front View



Side View

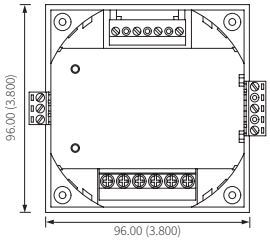




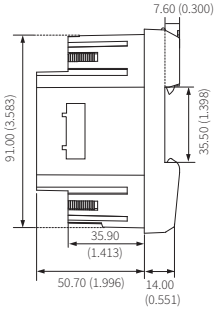
Cut Out

DIN Mount Meter Dimensions

Unit: mm (inches)



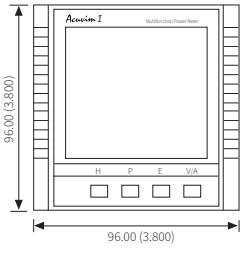
Rear View



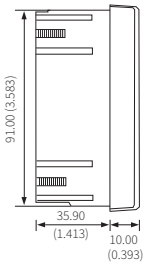
Side View

External Display Module Dimensions

Unit: mm (inches)



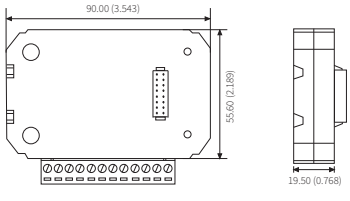
Front View



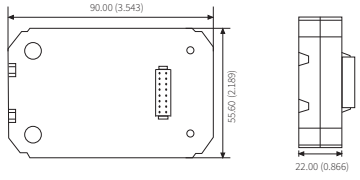
Side View

Note: 1. Display module is connected with a six foot 10 pin RJ45 cable, if you need a longer cable please specify that in the ordering statement.
2. Display module opening size and Acuvim II body openings are exactly the same size.

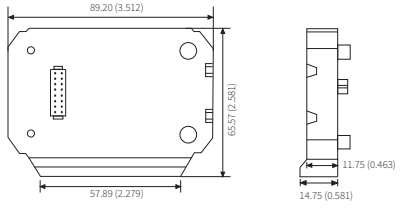
I/O Module Dimensions



Communication Module Dimensions



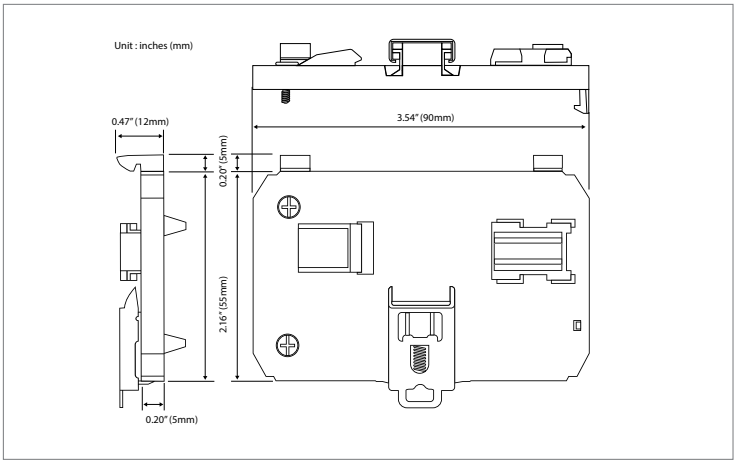
BACnet Module Dimensions

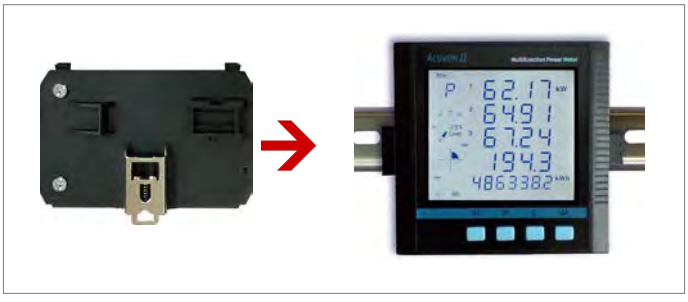


Acuvim II Series AXM-DIN Rail Mounting Adapter

AXM-DIN Rails adapter provide easy installation of panel-mount Acuvim II series meter on DIN rail in all models and IO options.

DIMENSIONS





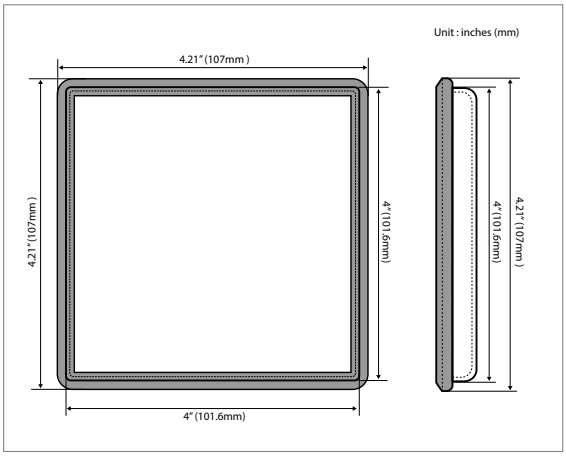
IP66/NEMA4X Protection Cover

The **IP66/NEMA4X Protection Cover** is designed for **Acuvim II**, Acuvim-L and all 96mm by 96mm display panel meters; it increases the IP environmental rating of a meter's display to IP66 or NEMA 4X regardless of the original rating of display.

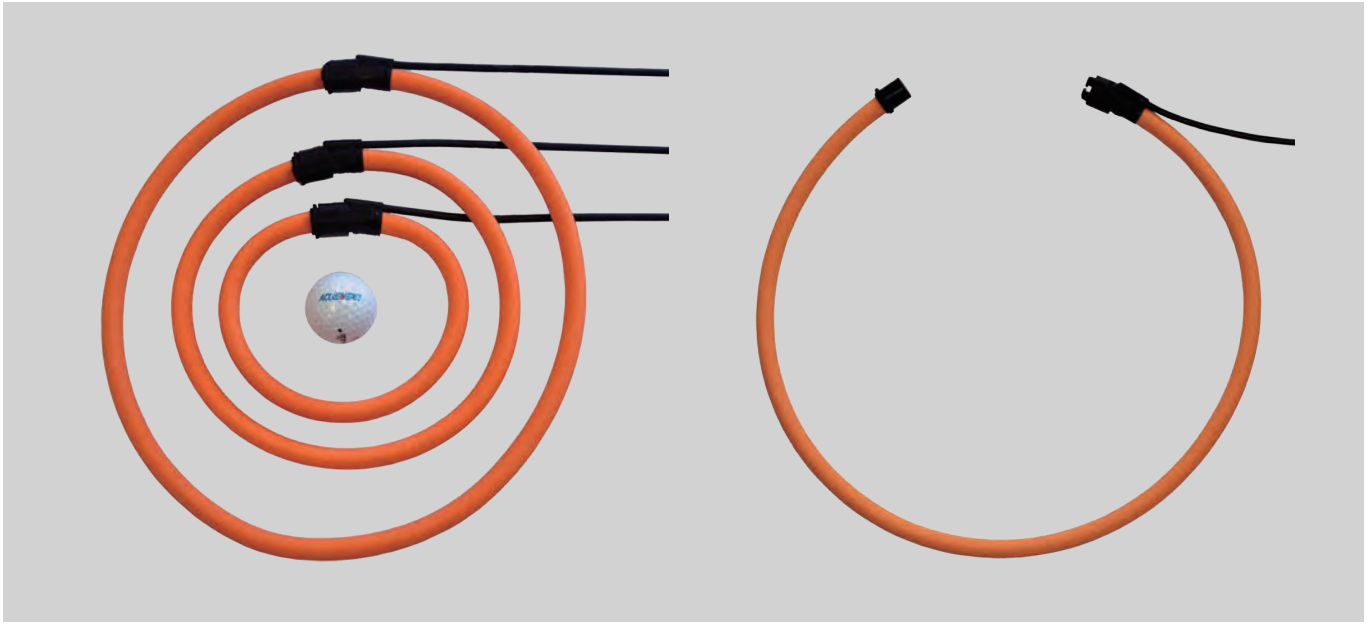
The IP66/NEMA4X Protection Cover prevents damage from dust, water, and other elements when paired with Acuvim II and L series meters they become an effective solution for high protection-required applications, such as outdoor panels.

Note: *To use the display keys, easily remove the IP66/NEMA4X Protection Cover as the seal is made of durable - tight grip rubber. Simply push back in place when you're done.*

DIMENSIONS

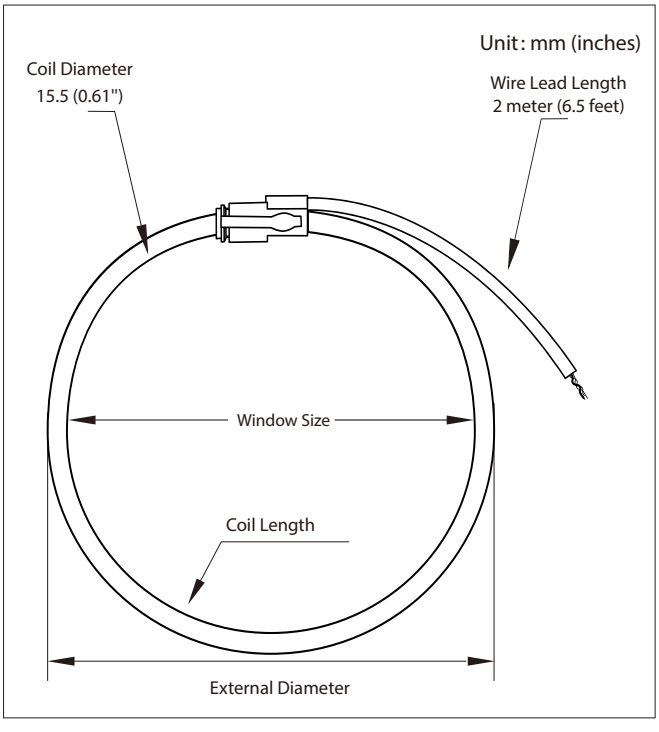


ROGOWSKI COIL



Accuenergy's flexible Rogowski coil is designed for use where regular solid or split core current transformers cannot fit, and is ideal for power quality monitoring such as harmonics. Advantages of the Rogowski coil include; high accuracy, wide measurement and frequency range with no additional integrator or power supply 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 Input Ranges*	5A-1200A 12.5A-3000A 25A-6000A 50A-12000A 250A-50000A
Frequency Range	20Hz - 5kHz
Accuracy	0.5%
Lead	White-Positive, Brown-Negative, Bare-Shield; 24AWG
Polarity	Arrow Towards Load (Current Flow Direction)
Operating Tempreture	-20°C - 70°C
Temperature Drift	+/- 0.07% Within Operating Temperature Range
Material	Orange Thermoplastic Rubber, Flame Retardant UL 94 V-0 Rated
Dielectric Strength	7400Vac @ 50/60Hz for 1 Minute



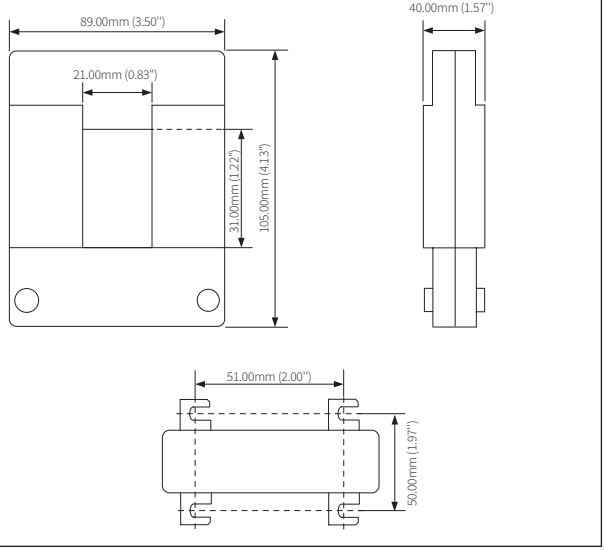
Dimensions mm (Inch)	RCT16	RCT24	RCT36	RCT47
Window Size	106 (4.17'')	178 (7.01'')	271 (10.67'')	369 (14.53'')
Coil Length	400mm (15.75'')	600mm (23.62'')	900mm (35.43'')	1200mm (47.24'')
External Diameter	143 (5.63'')	207 (8.13'')	302 (11.89'')	398 (15.66'')
Coil Diameter	15.5 (0.61'')			
Wire Lead Length	2 meters (6.5 feet)			

*Note: Listed ranges are standard input ranges, for any other current input ranges please contact Accuenergy.

SPLIT CORE CTS

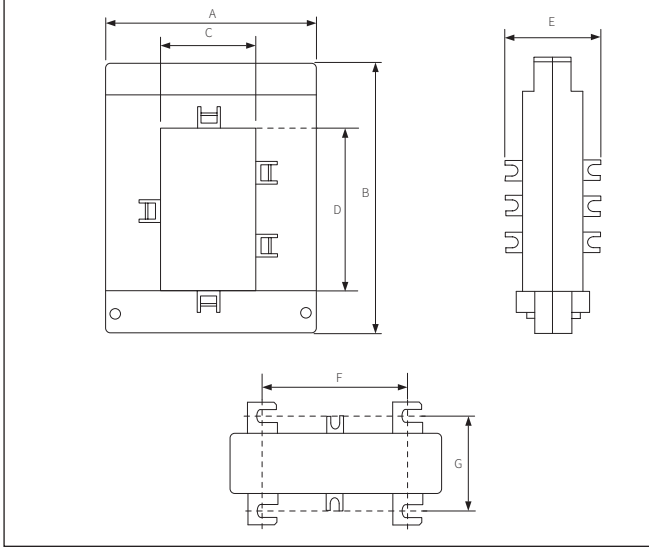
AcuCT-0812

Unit : mm (inches)



AcuCT-2031/AcuCT-3147/AcuCT-3163

Unit : mm (inches)



Model	A	B	C	D	E	F	G
AcuCT-2031	114.00(4.49")	145.00(5.71")	50.00(1.97")	80.00(3.15")	50.00(1.97")	78.00(3.07")	50.00(1.97")
AcuCT-3147	144.00(5.67")	185.00(7.28")	80.00(3.15")	120.00(4.72")	50.00(1.97")	108.00(4.25")	50.00(1.97")
AcuCT-3163	176.00(6.93")	247.00(9.72)	80.00(3.15")	160.00(6.30")	70.00(2.76")	120.00(4.72")	50.00(1.97")

ORDERING INFORMATION

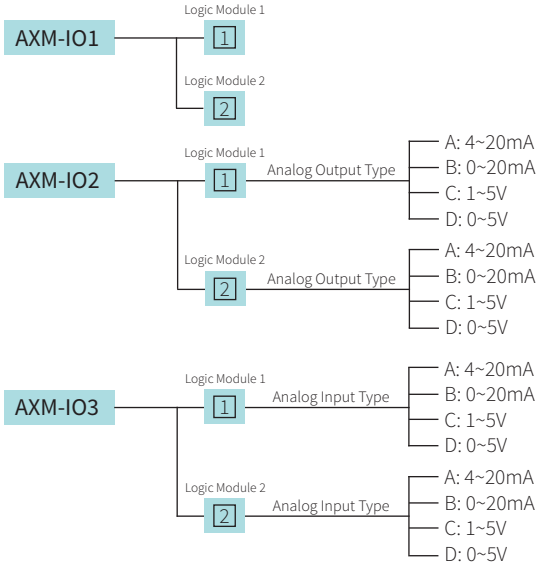
	Model		Mounting Option		Current Input		Power Supply
Ordering Number		-		-		-	
Ordering Example	Acuvim IIE	-	D	-		-	P1
	Acuvim II: Basic Model		D: LCD Display (Panel Mount Meter/Transducer)		5A – 5A/1A Input field selectable		P1: 100~415Vac, 50/60Hz 100~300Vdc
	Acuvim IIR: II + Data Logging		M: Din-Rail Mount Transducer without Display (Optional Remote Display Available)		mA – 80ma/100mA/200mA Input field selectable		P2: 20~60Vdc
	Acuvim IIE: IIR + Time of Use				RCT – AcuCT-Flex Input		
	Acuvim IIW: IIR + Waveform Capture and PQ Event Logging				333 – 333mV Input		

Note: 1. Accuenergy suggests using USB-RS485 converter for configuration, and 3 CTs per three phase circuits.
2. All fields must be completed to create a part number.
3. Add "-S" after power supply for anti-tampering seal option.
4. Contact Accuenergy for 400Hz frequency option; Acuvim IIW doesn't support this type.

Remote Display Option:

REM-□ — DS2: Compatible with Acuvim II Series "M" (DIN Mount) Models Only

I/O Option module:



I/O Module Ordering Example: AXM-IO2-1A

Note: *Refer to the Digital/Analog I/O table on page. 7*

Communication Option Module:

AXM-□
- **WEB-PUSH :** DNP 3.0 Over IP, Modbus®-TCP, HTTP/HTTPs Webserver, SMTP Email, SNMP, HTTP/HTTPs Push, FTP Post, sFTP Server, Datalogging
- **WEB2 :** DNP 3.0 Over IP, IEC 61850, Modbus®-TCP, HTTP/HTTPs Webserver, SMTP Email, SNMP, HTTP/HTTPs Push, FTP Post, sFTP Server, Datalogging, WiFi
- **BMS :** BACnet-MS/TP(Serial)
- **BIP :** BACnet-IP(Ethernet), HTTP/HTTPs Webserver
- **PROFI :** Profibus Module
- **RS485 :** Modbus®-RTU
- **MESH-900 (900MHz) :** Wireless Radio
- **MESH-868 (868MHz) :** Wireless Radio

Note: *Refer to the Communications Protocol table on page. 7*

Accessories

AXM-DIN — DIN Rail Adapter

IP66/NEMA4X — Environmental Protection Cover

Note: 1. 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 have a different logic number.

2. A maximum of 3 modules may be attached to the meter. If a communication module is used (example: AXM-NET), it must be installed on the back FIRST before the other modules are attached.

3. If Acuvim IIW uses DI to trigger a waveform capture, the I/O module logic number must be Module 1.

Additional Accessories

Rogowski Coil Ordering Information:

	Size		Current Range
Ordering Number		-	
Ordering Example	RCT16	-	1000
	RCT16 : 15.75" Coil, 4" Diameter		1000: Metering Range 5A to 1200A
	RCT24 : 23.62" Coil, 7" Diameter		2500: Metering Range 12.5A to 3000A
	RCT36: 35.43" Coil, 10.67" Diameter		5000: Metering Range 25A to 6000A
	RCT47: 47.24" Coil, 14.5" Diameter		10000: Metering Range 50A to 12000A
			50000: Metering Range 250A to 50000A

Note: 1. Make sure maximum current rating in system being metered is within the current metering range for Rogowski coil.
2. Please contact Accuenergy if other lengths of coil or current ranges are needed.

AcuPanel ordering information:

AcuPanel 9014 (NEMA4 Indoor Panel)
AcuPanel 9104X (NEMA4X Waterproof)

Split Core CT Ordering Information:

	Model		Rated Input		Output
Ordering Number					
Ordering Example	**AcuCT-2031**	-	**600**	-	**5**
	AcuCT-0812	-	**250**	-	**5**
			200: 200A		5: 5A Input
			250: 250A		
			300: 300A		
			400: 400A		
	AcuCT-2031	-	**400**	-	**5**
			400: 400A		5: 5A Input
			600: 600A		
			800: 800A		
			1000: 1000A		
	AcuCT-3147	-	**1000**	-	**5**
			1000: 1000A		5: 5A Input
			1200: 1200A		
			1600: 1600A		
	AcuCT-3163	-	**2000**	-	**5**
			2000: 2000A		5: 5A Input
			2500: 2500A		
			3000: 3000A		
			4000: 4000A		
			5000: 5000A		

Make Energy Usage Smarter