



AccuEnergy Acuvim-AL-D-5A-P1 Multifunction LCD Power Meter, 100-415VAC, 50-60Hz, 100-300VDC

Model: **Acuvim-AL-D-5A-P1**



The AccuEnergy Acuvim L three-phase multifunction energy meter is ideal for power distribution and energy management applications. This model includes a 60Hz basic unit without communication, standard mount with LCD display, 5Amp current, and a 100~415Vac, 50~60Hz, 100~300Vdc power supply. The Acuvim L features TRMS measurements, power quality analysis, and 4 quadrant energy. The Acuvim L satisfies the demands of medium and low voltage systems for commercial, industrial, and utility uses.

Brand:	AccuEnergy
Model:	Acuvim-AL-D-5A-P1
Order No:	Acuvim-AL-D-5A-P1
Condition:	NEW

Description

ACCUENERGY ACUVIM-AL-D-60-5A-P1 Multifunction LCD Power Meter 100~415Vac, 50~60Hz, 100~300Vdc

The AccuEnergy Acuvim L three-phase multifunction power and energy meter offers you reliability, with features like True-RMS measuring parameters and ANSI and IEC 0,2 Accuracy class. This model includes a 60Hz basic unit without communication, standard mount with LCD display, 5Amp current, and a 100~415Vac, 50~60Hz, 100~300Vdc power supply. With the Modbus TRU protocol, monitored data is easily accessible via a standard RS485 communication port. This energy meter also features 4 Quadrant Energy, Power Quality analysis, and Time of Use data. The Acuvim L is ideal for the metering of distribution feeder, generators, motors, transformers, and more: perfect for use with medium and low voltage systems in a variety of commercial, industrial, and utility applications.

Features:

- True-RMS measuring Parameters
- ANSI and IEC 0.2 Accuracy class
- Power Quality Analysis
- 4 Quadrant Energy
- Measure Individual Harmonics from 2nd to 15th (Acuvim-AL/BL/CL/DL)
- Module Design (Acuvim-DL/EL)
- TOU, 4 Tariffs, 12 Seasons, 14 Schedules (Acuvim-EL)
- Class leading Warranty

Applications:

- Metering of distribution feeders, transformers, generators, capacitor banks and motors
- Medium and low voltage systems
- Commercial, industrial, utility
- Power quality analysis

Specifications

ACCUENERGY ACUVIM-AL-D-60-5A-P1 Multifunction LCD Power Meter Specifications

Metering



Parameters	Acuvim-L Accuracy	Acuvim-EL/KL Accuracy	Resolution	Range
Voltage	0.5%	0.5%	0.1V	20V~1000kV
Current	0.5%	0.5%	0.001A	0~50000A
Current Demand	0.5%	0.5%	0.001A	0~50000A
Power	1.0%	0.5%	1W	-9999MW~9999MW
Reactive Power	2.0%	0.5%	1var	-9999Mvar~9999Mvar
Apparent Power	1.0%	0.5%	0.001V	0~9999MVA
Power Demand	1.0%	0.5%	1W	-9999MW~9999MW
Reactive Power Demand	2.0%	0.5%	1var	-9999Mvar~9999Mvar
Apparent Power Demand	1.0%	1VA	1VA	0~9999MVA
Power Factor	1.0%	0.5%	0.001	-1.0~1.0
Frequency	0.2%	0.2%	0.01Hz	45.00~65.00Hz
Energy	0.5%	0.5%	0.1kWh	0~99999999.9kWh
Reactive Energy	2.0%	0.5%	0.1kvarh	0~99999999.9kvarh
Apparent Energy	1.0%	0.5%	0.1VAh	0~99999999.9kVAh
Harmonics	2.0%	-	0.01%	0~100.0%
Running Time			0.1hrs	0~99999999.9hrs

Communication

RS-485 (Option)
Modbus-RTU Protocol
2-wire connection, Half-duplex, Isolated
1200 to 38400 baud rate

Input

Current Inputs (Each Channel)	
Nominal Current	5 A ac
Metering Range	0~6 A ac
Withstand	20Arms continuous 100Arms for 1 second, non-recurring
Burden	0.05VA (typical) @5Arms
Pickup Current	10Vac
Accuracy	0.5%

Voltage Inputs (Each Channel)	
Nominal Full Scale	400Vac L-N, 690Vac L-L (+20%)
Withstand	1500Vac continuous 2500Vac, 50/60Hz for 1minute
Input Impedance	45Hz~65Hz
Pickup Voltage	10Vac
Accuracy	0.5%

Energy Accuracy (Acuvim-EL)	
Active	(according to IEC 62053-22) Class 0.5s (according to ANSI C12.20) Class 0.5
Reactive	(according to IEC 62053-23) Class 2

Harmonic Resolution	
Metered Value	2nd ~ 15th harmonics (THD of Acuvim-DL is 2nd to 25th)

Control Power

Universal	AC or DC
AC/DC Control Power	
Operating Range	100~415Vac, 50/60Hz, 100~300Vdc
Burden	3W
Withstand	3250Vac, 50/60Hz for 1 minute
Low Voltage DC Control Power (Optional)	
Operating Range	20~60Vdx
Burden	3W

Digital Output Option

Digital Output (DO)	(Photo-MOS)
Voltage Range	0~250Vac/dc
Load Current	100mA (Max)
Output Frequency	25Hz, 50% Duty Ratio
Isolation Voltage	2500V

Digital Input Option

Digital Input (DI)	
Input Voltage Range	20~250Vac/dc
Input Current (Max)	2mA
Start Voltage	15V
Stop Voltage	5V
Pulse Frequency (Max)	100Hz, 50% Duty Ratio
SOE Resolution	2ms

Operating Environment

Operation Temperature	-25°C to 70°C
Storage Temperature	-40°C to 85°C
Relative Humidity	5% to 95% non-condensing
Pollution Degree	2

Standard Compliance

Product	
USA	UL 61010-1
Canada	cUL 61010-1
Europe	IEC 61010-1
Emission	
Radiated/Conducted	FCC Part 15 Subpart B, Class A
Radiated/Conducted	EN 55011
Harmonic	IEC 61000-3-2
Voltage Fluctuation	IEC 50081-2
Radio Interference	IEC 50081-2
Immunity	

ESD	IEC 61000-4-2
Radiated, radio-frequency, electromagnetic field	IEC 61000-4-3
Electrical fast transient/burst	IEC 61000-4-4
Surge	IEC 61000-4-5
Conducted disturbances	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11
Generic Immunity Standard for Industrial Environment	EN 50082-2