## **ACCUENERGY**

## **AXM-WEB2**

Acuvim II/ Acuvim-L Communications Module











DATASHEET

## **AXM-WEB2**

Dual Ethernet and Wi-Fi Communication Module Datasheet







AXM-WEB2 includes dual Ethernet ports and Wi-Fi communication channel for the Acuvim II and Acuvim-L Series power meters. Multi-protocols are supported such as IEC61850 2nd Ed., Modbus, MQTT, Google IoT, BACnet, and DNP3 V2.





# Accuenergy Inc. Los Angeles - Toronto - Pretoria North America Toll Free: 1-877-721-8908 Web: www.accuenergy.com Email: marketing@accuenergy.com

Revision Date: February 2024 Version: 2.0.0 Specs Subject To Change Without Notice.

## ACCUENERGY

## Communication

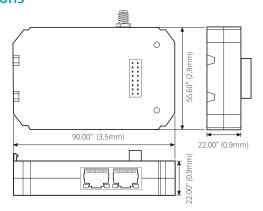
Meter Series	Acuvim II, Acuvim-L		
Ethernet	LAN Dual RJ45 10/100M Ethernet		
Wi-Fi	2.4GHz,5GHz		
Protocols	IEC 61850 2nd Ed., EtherNet/IP, Modbus-TCP/IP, BACnet-IP, SNMP V3, DNP 3.0 V2, RSTP, SMTP, NTP Synchronization, HTTP/HTTPs post, FTP post, sFTP server, HTTPs webserver, Google IoT, MQTT		

#### **Features**

- + Dual Ethernet ports and Wi-Fi works simultaneously with different networks & DAQ systems. RJ45 supports individual network configuration COMTRADE file format for waveform capture and event data of electrical power systems
- + 8 GB onboard memory with 1-second interval datalogging capabilities. Metering data backup log to avoid data loss during network downtime
- + Industry leading Fast Read mode at 100ms and 20ms response rate via Modbus-TCP/IP protocol for real-time data updates

- + Secure TLS1.2/SSL compliant encrypted webserver for industry-leading cybersecurity standard EtherNet/IP and IEC 61850 protocol support for industrial automation, utility and substation
- + Remote access to WEB2
  dashboard interface for realtime meter data, trend analysis,
  harmonics, waveform in graph
  and tabular format Wi-Fi
  supports Access Point mode
  and Station mode for both
  direct connection/configuration
  and public Wi-Fi network
  connection

#### **Dimensions**



## **Ordering Information**

	Module Type	-	Protocol	
Ordering Example:	AXM-WEB2			
	AXM		WEB2	Two Ethernet ports, Wi-Fi

## **AXM-WEB2 FOLC**

Fiber Optics, Ethernet, & Wi-Fi Communication Module Datasheet







AXM-WEB2 FOLC provides fast Fiber Optics LC port, single Ethernet port and Wi-Fi communication channel for the Acuvim II and Acuvim-L Series power meter. Multi-protocols are supported such as IEC 61850 2nd Ed., EtherNet/IP, Modbus, BACnet, DNP3 V2, Google IoT, and MQTT.





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#### Communication



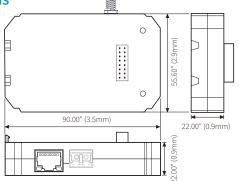
Meter Series	Acuvim II, Acuvim-L
Fiber Optics Connector Type	LC
Wavelength	1310nm
Optical Fiber Details	Multimode 62.5/125 μm and 50/125 μm
Ethernet	LAN RJ45 10/100M Ethernet
Wi-Fi	2.4GHz, 5GHz
Protocols	IEC 61850 2nd Ed., EtherNet/IP, Modbus-TCP/IP, BACnet-IP, SNMP V3, DNP 3.0 V2, SMTP, NTP Synchronization, HTTP/HTTPs post, FTP post, sFTP server, HTTPs webserver, Google IoT, MQTT

#### **Features**

- + Duplex Fiber Optics LC connector, Ethernet port, and Wi-Fi works simultaneously with different networks & DAQ systems.
- + Secure TLS 1.2/SSL compliant encrypted webserver for industry-leading cybersecurity standard
- + Multimode 62.5/125 μm and 50/125 μm for data centers, battery storage and utility
- + COMTRADE file format for waveform capture and event data of electrical power systems
- + 8 GB onboard memory with 1-second interval datalogging capabilities. Metering data backup log to avoid data loss during network downtime

- + Industry leading Fast Read mode at 100ms and 20ms response rate via Modbus-TCP/IP protocol for real-time data update
- + 802.3u Fast Ethernet 100Base-FX compatible up to 2km
- + EtherNet/IP and IEC 61850 protocol support for industrial automation, utility and substation
- + Remote access to WEB2 dashboard interface for realtime meter data, trend analysis, harmonics, waveform in graph and tabular format
- + Wi-Fi supports Access Point and Station mode for both direct connection/configuration & public Wi-Fi network connection

## **Dimensions**



## **Ordering Information**

	Module Type -	Protocol	
Ordering Example:	AXM-WEB2 FOLC		
	AXM	WEB2 FOLC	Ethernet, Fiber Optics LC, Wi-Fi

## **AXM-WEB2-D**

Dual Ethernet Communication Module Datasheet







AXM-WEB2-D includes dual Ethernet ports for the Acuvim II and Acuvim-L Series power meters. Multi-protocols are supported such as IEC61850 2nd Ed., Modbus, BACnet, MQTT, Google IoT, and DNP3 V2.





## Accuenergy Inc. Los Angeles - Toronto - Pretoria North America Toll Free: 1-877-721-8908 Web: www.accuenergy.com

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## ACCUENERGY

#### Communication

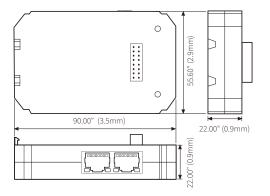
Meter Series	Acuvim II, Acuvim-L
Ethernet	LAN Dual RJ45 10/100M Ethernet
Protocols	IEC 61850 2nd Ed., EtherNet/IP, Modbus-TCP/IP, BACnet-IP, SNMP V3, DNP 3.0 V2, RSTP, SMTP, NTP Synchronization, HTTP/HTTPs post, FTP post, sFTP server, HTTPs webserver, Google IoT, MQTT

#### **Features**

- + Dual Ethernet ports works simultaneously with different networks & DAQ systems. RJ45 supports individual network configuration
- + COMTRADE file format for waveform capture and event data of electrical power systems
- + 8 GB onboard memory with 1-second interval datalogging capabilities. Metering data backup log to avoid data loss during network downtime
- + Industry leading Fast Read mode at 100ms and 20ms response rate via Modbus-TCP/IP protocol for real-time data updates

- + Secure TLS1.2/SSL compliant encrypted webserver for industry-leading cybersecurity standard
- + EtherNet/IP and IEC 61850 protocol support for industrial automation, utility, and substation
- + Remote access to WEB2 dashboard interface for realtime meter data, trend analysis, harmonics, waveform in graph and tabular format

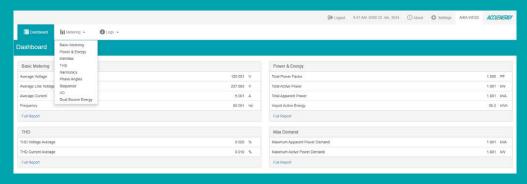
## **Dimensions**



## **Ordering Information**

	Module Type -	Protocol	
Ordering Example:	AXM-WEB2-D		
	AXM	WEB2-D	Two Ethernet ports

## **WEB2 Interface**



### **Metering Dashboard**

- + Basic Metering
- + THD

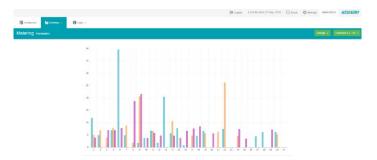
+ Sequence

- + Power & Energy
- + Harmonics
- + 1/0

- + Min/Max
- + Phase Angles

## **Metering Harmonics**

Display voltage and current harmonics between  $2^{nd}$  -  $3^{st}$  or  $32^{nd}$  -  $63^{rd}$  ingraphical and tabular format. Parameters are updated every 15 seconds.



## Waveform Log

Available for Acuvim IIW, it supports waveform capture when a power quality event occurs 10 cycles before and after the triggering point for voltage sag, swells, or overcurrent.



### **Trend Log**

The real-time trend and energy trend graph shows a number of different parameters with option to configure different time frames and time intervals.



## **Phase Angle**

Visual diagram of the phase angles of voltage and current waveform and can be used for remote troubleshooting. Parameters are updated every 10 seconds.



## **COMMUNICATION MODULES**

COMMUNICATIO	N MODULES			• Function; • Option; Blank NA
	Standard	AXM WEB2 FOLC	AXM WEB2	AXM-WEB2-D
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Modbus-RTU	•			
BACnet-MS/TP	•			
DNP 3.0 Over IP		•	•	•
IEC 61850		•	•	•
Modbus-TCP/IP		•	•	•
HTTP/HTTPs Webserver		•	•	•
SMTP Email		•	•	•
SNMP V3		•	•	•
EtherNet/IP		•	•	•
MQTT		•	•	•
RSTP		•	•	•
IPv6		•	•	•
HTTP/HTTPs Push		•	•	•
FTP Post		•	•	•
sFTP Server		•	•	•
Datalogging	16MB	8GB	8GB	8GB
BACnet-IP		•	•	•
PROFIBUS				
Wi-Fi		•	•	
RJ45 Ports		1	2	2
Fiber Optics LC		•		