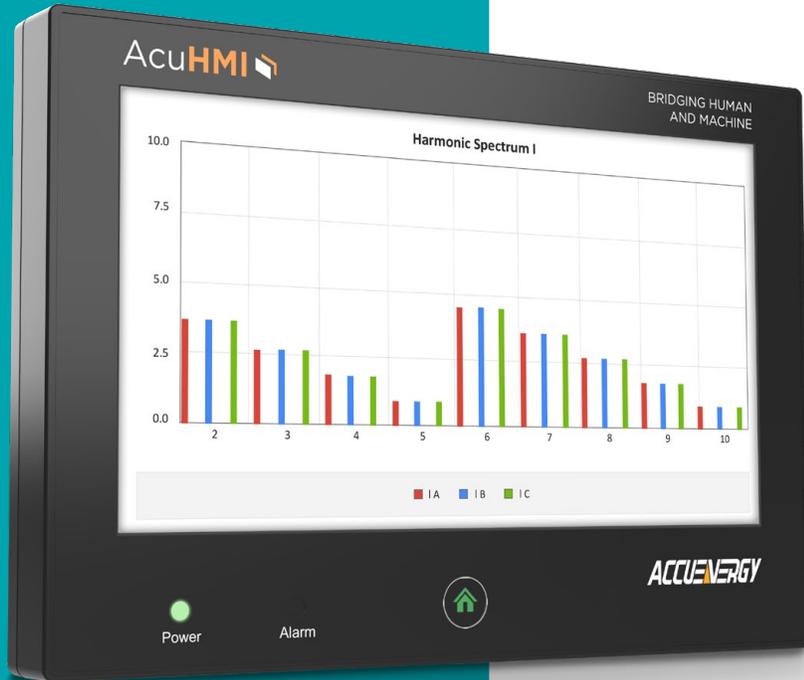


# AcuHMI

## HMI Display and Gateway Datasheet



### DESCRIPTION

AcuHMI is a human machine interface (HMI) with an interactive display and gateway for real-time energy data concentration, plus control, and management of connected devices, all through a centralized hub. Configure alarms, data loggers, post methods, user roles, and event triggers across multiple devices from the HMI or webpage interface. Supports RSTP bridging and RS485 daisy-chain networking for a reliable connection across multiple industrial protocols with meters, and other devices.



### FEATURES

- + Aggregates data from multiple devices for real-time monitoring and management from central HMI hub.
- + Built-in gateway:
  - Downstream: Modbus RTU/Modbus TCP/IP and BACnet MSTP/BACnet IP
  - Upstream: MQTT, SNMP, Modbus TCP/IP, BACnet IP
  - AcuCloud, AWS IoT, or cloud integration.
- + Two Ethernet and two RS485 ports with optional H-IO1 module includes 8 RO and 8 DI.
- + Dual Ethernet ports support RSTP bridging and RS485 daisy chain networks.
- + Webpage Interface for remote monitoring, and advanced configuration.
- + Data post method and file forwarding via FTP, SFTP, HTTP/HTTPS.
- + 7-inch capacitive touch screen colour display.
- + 32GB on-board memory for device datalogging.
- + Multiuser support with options for account roles and permissions.

## KEY FEATURES

### HMI Display & Webpage Interface

- + HMI provides a central hub for management of multiple metering devices, the AcuHMI 7-inch touch screen display allows an operator to quickly review and configure data parameters and device operation. The Webpage Interface allow operators to access device settings remotely for data analyzes and advance configurations options. View visualization charts and tabular data for greater insight.

### Data Logger

- + 32GB memory for three configurable data loggers and rapid logger for fast polling frequencies up to 1-second intervals. Data logs are time-stamped to standard UTC date/time format and files are saved as CSV or JSON.

### Alarm Monitoring

- + Alarm logs and status can be viewed from the HMI or Webpage Interface. Set alarms to automatically monitor parameter thresholds or when connected devices becomes offline. When triggered an alert status will appear, and events will be logged.

### Data Post and File Export

- + AcuHMI can be configured to post data log to remote file servers and cloud services using HTTP/HTTPS or FTP/SFTP posting methods. Data log files can also be downloaded with file length capable of collecting up to 1 month of information.

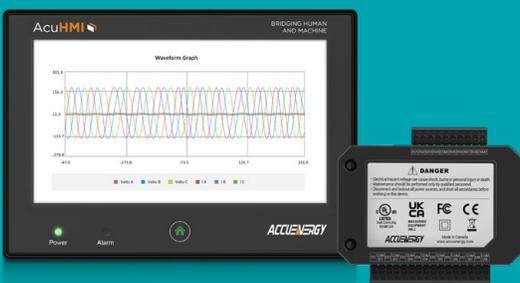
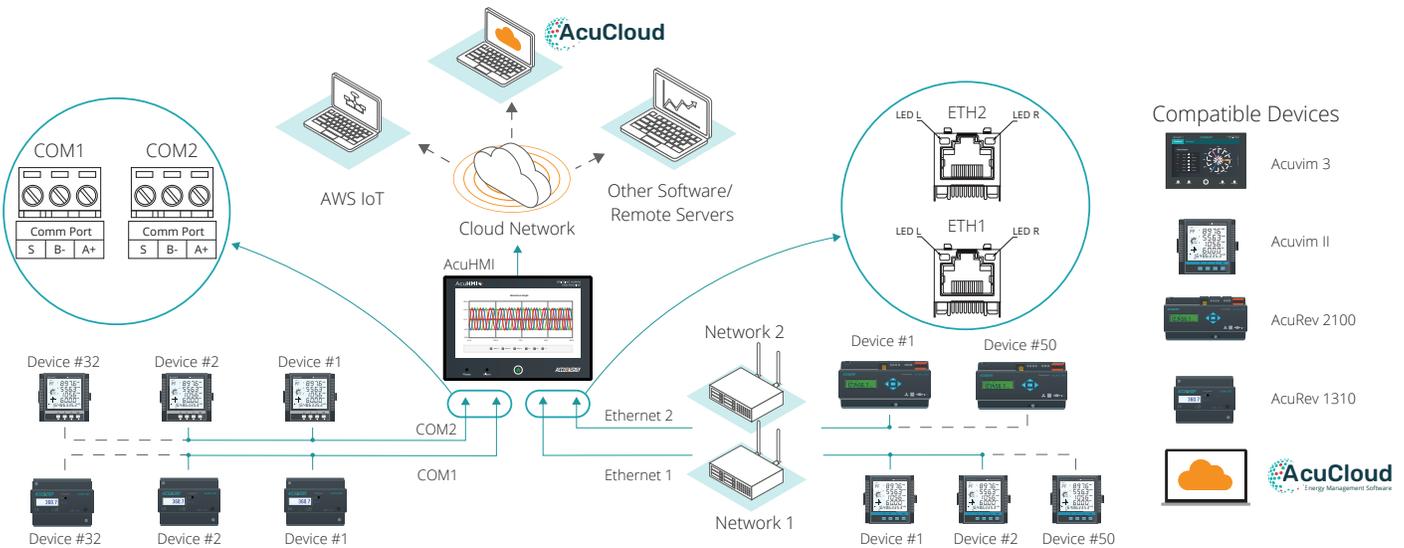
### Rapid Spanning Tree Protocol (RSTP)

- + Dual Ethernet ports supports RSTP bridging for a resilient loop-free, redundant network. RSTP automatically prevents broadcast storms and quickly recalculates optimal network paths when loops, redundant links, or link failures occur.

### Multi-Protocol Gateway

- + AcuHMI gateway maps and translates data between different network protocols with support for Modbus RTU, Modbus TCP/IP and BACnet MSTP/IP downstream devices. It also supports MQTT, SNMP, Modbus TCP/IP and BACnet IP for upstream integration to remote servers or cloud services.

## ACUHMI DOWNSTREAM / UPSTREAM NETWORK



## APPLICATIONS

- + Data Center and PDUs
- + Industrial Automation and Control
- + Energy Monitoring and Metering
- + Industrial IoT
- + Building Management Systems
- + Electric Switchgear and control panels

## SPECIFICATIONS

### Display Specifications

Serial Ports	2 x RS485 ports
Ethernet Ports	2 x RJ45 Ethernet ports
Supported Communication Protocols	Modbus RTU/Modbus TCP/IP BACnet MSTP/ BACnet IP MQTT SNMP HTTP/HTTPS FTP/SFTP SNTP NTP

### Control Power

Control Power	12-36VDC $\pm$ 10%
Burden	5W

### Display Specifications

LCD Type	Colour TFT
Illumination Backlight	White LED, software controlled
Resolution	800x480 pixel
Viewing Area	7-Inch
Colours	24-bits
Touchscreen	Capacitive

### Operating Environment

Operating Temperature	0°C to 55°C, 32°F to 131°F
Storage Temperature	-20°C to 60°C, -4°F to 140°F
Relative Humidity	0% to 95% Non-Condensing
Altitude	<2000m
Pollution Degree	2

### Mechanical Specifications

Dimensions (mm)	184.5mm x 129.5mm x 85mm 7.26" x 5.10" x 3.35"
Panel Cutout (mm)	Square 92mm x 92mm 3.62" x 3.62"  Circle 101.6mm Radius 4.00" Radius
Weight	544.31g (1.20lbs)
Mounting Method	Panel Mount

### Standard Compliance & Certifications

Environmental Standard	IEC 60068-2, CE, RoHS
Safety Standard	IEC/UL 61010-1:2010, IEC/UL 61010—2-030:2010
EMC Standard	IEC 61000-6-2, IEC 61326-1, IEC 61000-4/-2-3-4-5-6-8, CISPR 32, FCC Part 15 Class A, EN55032 Class A

### H-IO1 Digital Input (DI) Interface

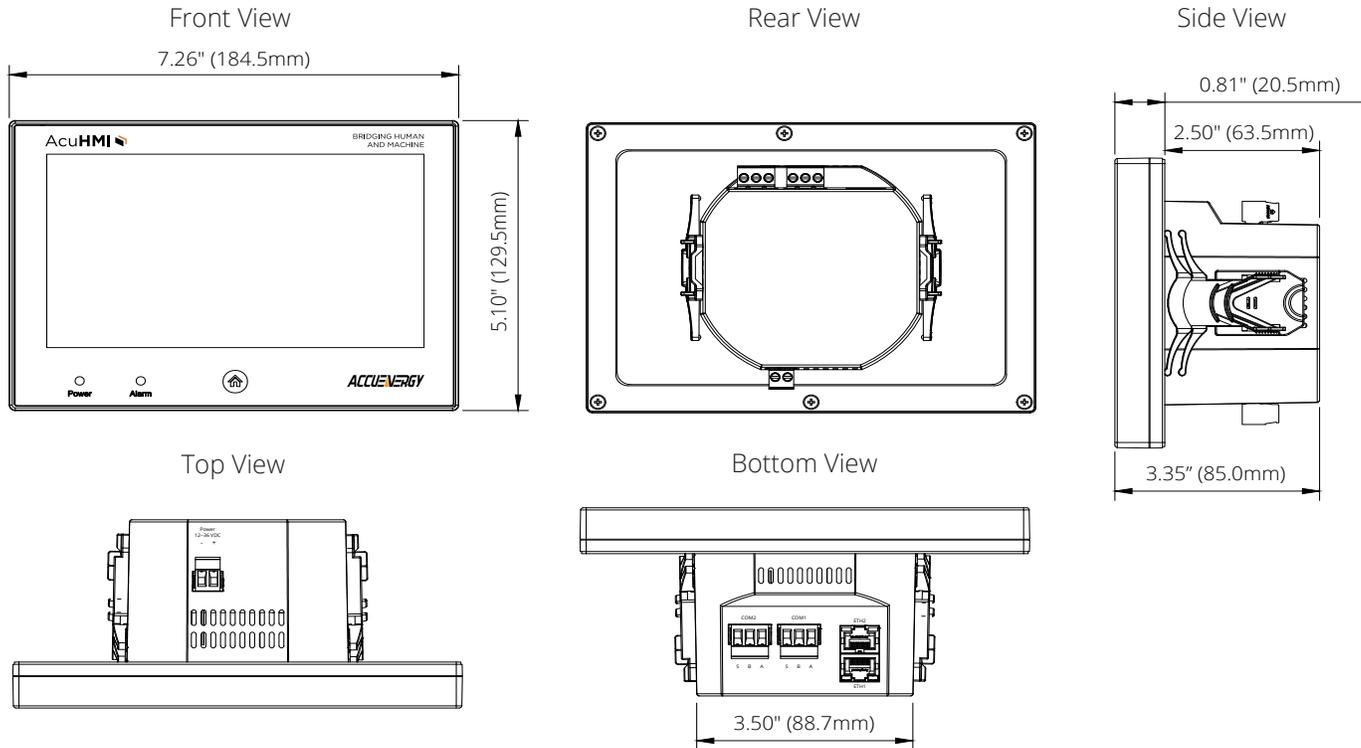
Channel Count	8 Digital Inputs (DI1-DI8)
Input Voltage Range	0-28VDC
ON-State Voltage	> 15VDC
OFF-State Voltage	< 5VDC
Isolation Voltage	1500VAC

### H-IO1 Relay Output (RO) Interface

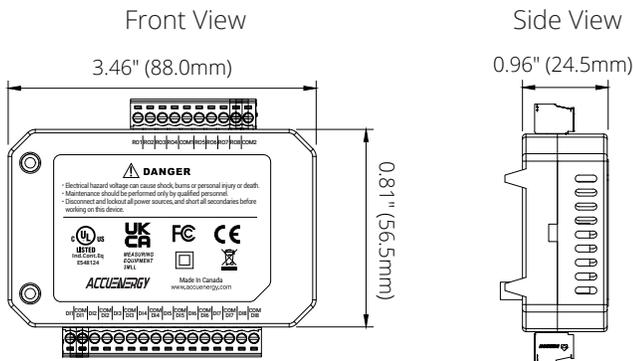
Channel Count	8 Relay Outputs (RO1-RO8) & 2 Common Terminals (COM1 & COM2)
Relay Type	1 Form A (Normally Open)
Max Switching Voltage	250VAC or 30VDC
Max Load Current	5A (Resistive Load)
Isolation Voltage	2500VAC

## DIMENSIONS

### AcuHMI Dimensions



### H-IO1 Dimensions



## ORDERING INFORMATION

Model Name	Function Type	Screen Size	I/O Module (Optional)
AcuHMI	1	7	H-IO1
<b>Ordering Example:</b>			
	AcuHMI-1-7		
	AcuHMI-1-7-H-IO1		



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ISO 9001, 14001  
 & 45001 Certified



ISO 27001 &  
 50001 Certified

