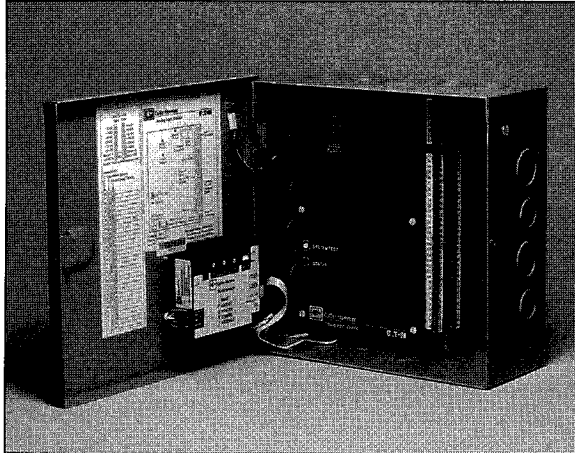


## Sales Presentation Notes

# ANALOG INPUT MODULE



### Potential Customers

- Facilities managers, maintenance supervisors, energy engineers, and measurement and verification program engineers requiring usage data by utility.
- Any commercial, institutional, or industrial user contemplating utility usage monitoring for energy conservation.
- Any facility requiring energy costs for allocation to individual processes, departments, or tenants.
- All customers with an existing Cutler-Hammer/Westinghouse IMPACC System.

### Applications

- Monitoring real time usage of gas, steam, temperature, pressure, water, sewer, compressed air, BTUs, run-time, or any other analog or digital signal as a drop on the IMPACC network.
- Monitoring building pressures, temperature, and humidity in real time.
- Allocation of usage costs by utility to individual departments, production lines, and tenants when used in conjunction with Cutler-Hammer logging and billing software such as E-Log, E-Bill, and E-Trend.
- Creating current usage load profiles to verify cost reductions on energy-saving projects such as lighting, chiller, and boiler retrofits; and steam and compressed air line upgrades.

- Establishment of base line load profiles before enacting energy-saving retrofit projects. Once these projects have been implemented, actual savings can be verified by tracing new load profiles.

### Key Features

- Can be configured to monitor all types of customer energy and utility information.
- Monitors inputs from 32 0-20 of 4-20 milliampere conventional transducers or dry contacts; or counts pulses and tracks run-time hours. Scales, identifies units, performs BTU calculations, and tracks run-time hours within the unit. No PLC or programming is required.
- Obtains data over an IMPACC system from non-IMPACC devices. Analog Input Modules can be daisy-chained together on a twisted shielded pair network with IQ and IMPACC devices back to a central monitoring computer running IMPACC software. This eliminates PLCs that require custom programming.
- Communicates as a single device on an IMPACC network via an IPONI Communications card, included as standard.
- IMPACC software provides for easy configuration and allows the user to identify alarm points for the inputs and trends the data for historical analysis and billing.
- Two contact outputs can be configured to close contact on an alarm condition for use as a load alarm.

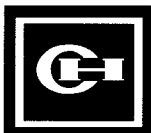
### Product Presentation

The IMPACC demo software includes a script which guides you through demonstrating the Analog Input Module features within the overall framework of real time and historical monitoring. A PowerPoint presentation featuring energy monitoring devices and the Analog Input Module is available over the Internet Advanced Products Support Center homepage at [www.cutlerhammer.eaton.com](http://www.cutlerhammer.eaton.com).

### Literature and Product Information

Instruction Leaflet IL 17556 provides detailed technical specifications, wiring, and installation instructions; E-Bill Software (SA-449) energy cost allocation and analysis package; Electric Utility Deregulation (SA-466) Cutler-Hammer energy management solutions; IMPACC (SA-11998) power monitoring system for electrical distribution systems.

Order from the Source W Fulfillment Center in Trafford. Literature and the latest IMPACC demo software can be found on the Cutler-Hammer Intranet at [www.ch.eaton.com](http://www.ch.eaton.com).



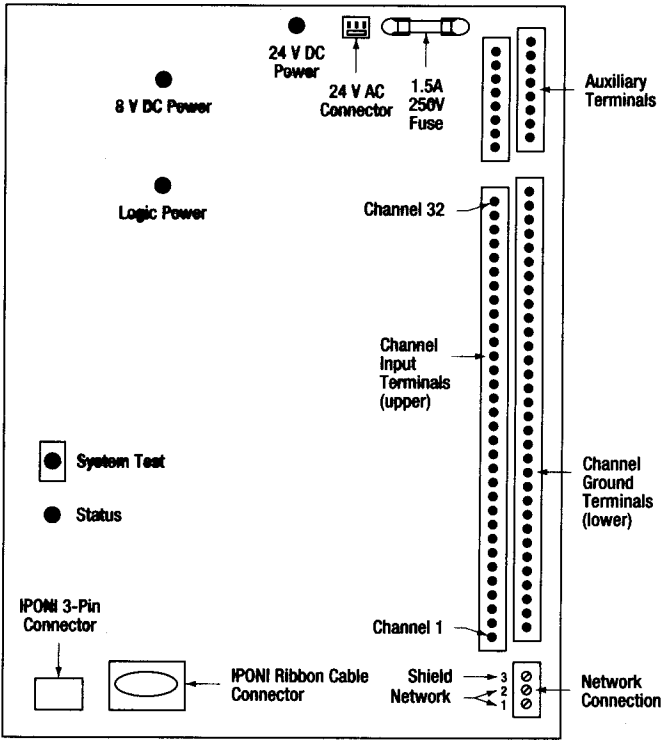
**Cutler-Hammer**

**EATON**

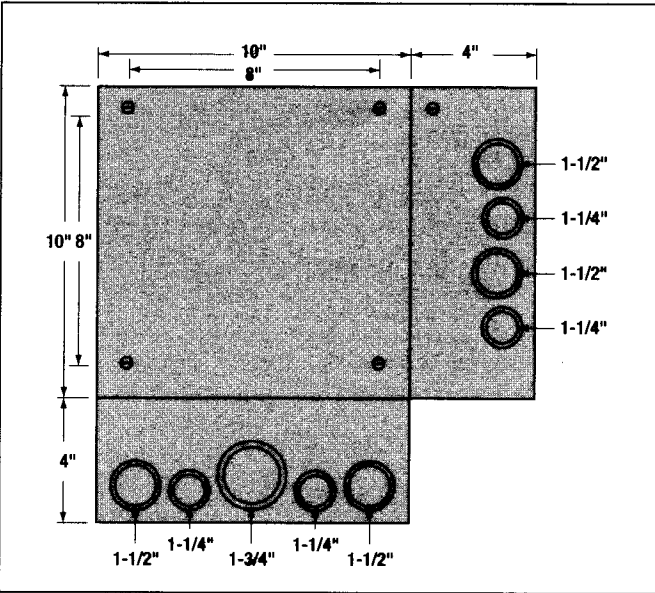
# ANALOG INPUT MODULE

## Specifications

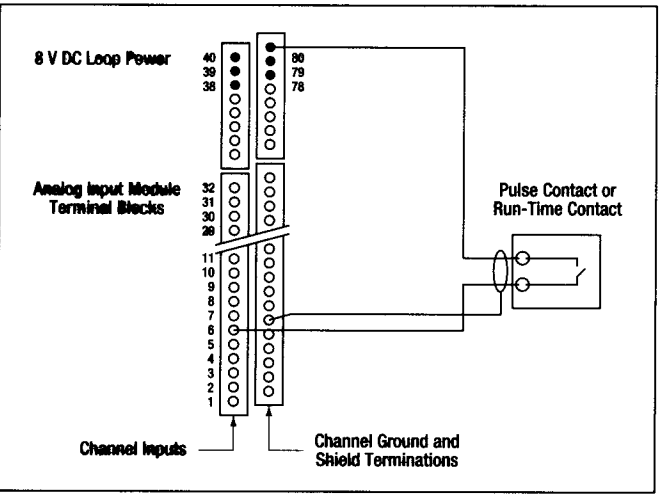
- 32 Input Channels, Nonisolated,  $\pm 10$  Volts Maximum.
- 499 Ohm Impedance.
- Capacitor Backed-Up RAM.
- Current Input: 0-20 mA DC.  
Accuracy  $\pm 0.02$  mA from 0.2 to 20 mA (excludes sensor error).  
Resolution 0.01 mA.
- Pulse Input: Form "A" contact closure.  
10 Hz maximum, 50% duty cycle.  
10ms debounce.
- Run-Time Input: Form "A" contact closure.
- Power Supply: 120/240 V AC UL listed transformer.
- Power Consumption: 8 VA including IPONI.
- Communications: Includes 1200/9600 Baud IPONI.
- Auxiliary Power: 8 V DC and 24 V DC.  
16 VA total, maximum.
- Operating Environment: 32-125°F (0-50°C).  
20-80% RH noncondensing.
- Enclosure: NEMA 1; 10" H x 10" W x 4" D.
- Mounting Holes: See dimensions below.
- Catalog Number: AIM
- Style Number: 4D13140G01



Interior View of Analog Input Module



Dimensions



Pulse and Run-Time Contact Sensor Wiring

The Analog Input Module provides both 8 V DC and 24 V DC which acts as a current source for pulse or run-time contacts such as KW pulses from a pulse initiator or status contacts from an auxiliary relay.

## For Additional Analog Input Module Information

Contact the Advanced Products Support Center at 800-809-2772 or 412-494-3750.

## Cutler-Hammer

Five Parkway Center  
Pittsburgh, PA 15220  
www.cutlerhammer.eaton.com

