

# • D-100 FLOW DISPLAY • WITH NETWORK INTERFACE



## FEATURES

### **Works With Virtually Any Flow Meter -**

The standard flow input of the D-100 accepts active or passive 4 – 20 mA, active or passive pulse and contact closure flow signals.

### **Serial Communications -**

Optional communications card provides all rate and total data to the control system through a single network connection, reducing installation costs.

### **Supports a Wide Variety of Communications Protocols -** The D-100 can be provided with any of the following network interface options:

- BACnet/IP
- BACnet MS/TP
- LONWORKS FTT10
- MODBUS RTU-RS485
- MODBUS RTU-TCP/IP
- Johnson Controls Metasys N2
- Siemens Apogee P1

### **Suitable for Bi-directional Applications -**

The D-100 accumulates separate totals for flow in each direction. The totals may be read locally on the display or remotely via an optional network interface.

### **Simple Installation and Commissioning -**

The D-100 is factory programmed and ready for use upon delivery. All programming functions are accessible via front panel display and keypad.

## DESCRIPTION

The D-100 is a totalizing display module that provides a local indication of liquid or steam flow rate and total data. The flexible design can also be configured with an optional network interface to communicate flow data to the building control network. It is housed in a steel wall mounted enclosure with a built-in user interface/display. The standard flow input accepts 4-20 mA, pulse or contact closure flow signals. The versatile D-100 can also function as a network interface for 2 additional analog rate inputs and one additional totalizing pulse input. It can also be configured with up to 4 optional analog outputs.

## APPLICATIONS

- HVAC chilled water, condenser water and hot water
- Hot and cold domestic water
- Gray water and irrigation water
- Saturated or superheated steam
- Process monitoring

## GENERAL SPECIFICATIONS

### **Accuracy**

Analog inputs: 0.1% of full scale  
Analog outputs: 0.1% of full scale

### **Mechanical**

Electronics Enclosure:

Standard: steel NEMA 13 wall mount  
10" x 8" x 4"

Optional: steel NEMA 4 wall mount 10" x 8" x 4"

### **Electrical**

Input power:

Standard: 24VAC 50/60Hz, 500mA max

Optional: 120VAC 60Hz, 250mA max

Optional: 230VAC 50Hz, 250mA max

### **Internal power supply**

Provides 24VDC, 250mA maximum to electronics and sensors

### **Display**

Standard: 2-line Alphanumeric LCD displays flow rate and flow total

Alpha: 16 character, 0.2" high, Numeric 7 digit, 0.4" high

## Programming

Factory programmed for specific application  
Field programmable via front panel interface



## Memory

Non-volatile EEPROM memory retains all program parameters and totalized values in the event of power loss.

## Output Signals

Pulse Outputs:

(2) isolated contact closure outputs for separately totalizing forward and reverse flow from the standard input

Isolated contact closure output for indicating flow direction

Analog Output Options:

Single isolated analog output

4-20mA, 0-10V or 0-5V outputs

Multiple (4) isolated analog outputs

4-20mA, 0-10V or 0-5V outputs

Serial Communications Options:

MODBUS RTU RS485

MODBUS RTU TCP/IP

BACnet MS/TP

BACnet UDP/IP

LONWORKS FTT10A

Johnson Controls Metasys N2

Siemens P1 FLN

Optional Interval Data Logging:

This option provides up to 24 hours of rate and total data logging in 15 minute intervals. Data includes date/time stamp, measured value & scaling factors when appropriate.

## Input Signals

Standard: (1) totalizing flow input 4-20 mA, contact closure or pulse

(1) contact closure input for flow direction

Optional: (2) auxiliary analog rate inputs 4-20 mA

(1) auxiliary totalizer input - pulse or contact closure

## Ambient Temperature Range

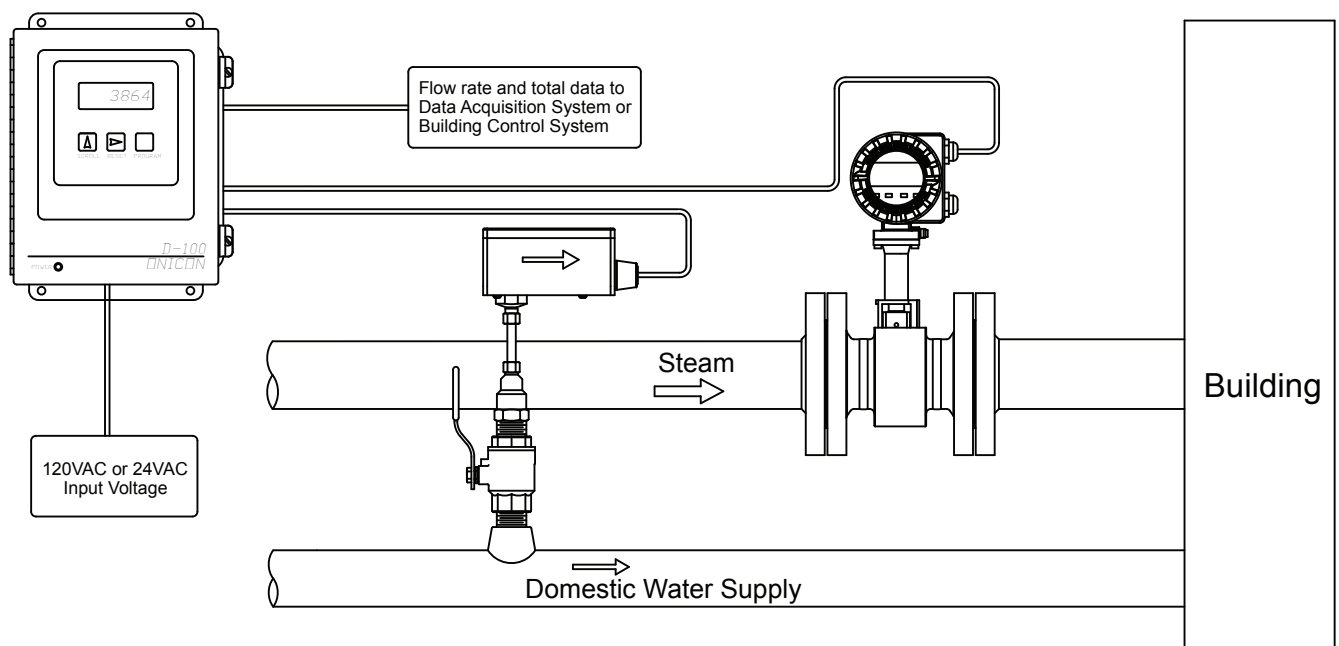
-20° F to 140° F

## ORDERING INFORMATION

Item #	Description
D-100	Standard D-100 without network interface
D-100-RTU	D-100 with MODBUS RTU RS485 interface
D-100-TCP	D-100 with MODBUS RTU TCP/IP interface
D-100-MS/TP	D-100 with BACnet MS/TP interface
D-100-IP	D-100 with BACnet IP interface
D-100-LON	D-100 with LONWORKS FTT10A interface
D-100-N2	D-100 with Johnson Controls Metasys N2 interface
D-100-P1	D-100 with Siemens Apogee FLN interface

Note: Specifications are subject to change without notice.

## TYPICAL D-100 INSTALLATION



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