

E-Chart

Introduction

The E-Chart is a **single meter run**, custody flow computer featuring a standard one (1) DP/Frequency meter connection, one (1) auxiliary, uncompensated, Frequency-type meter connection, and an ultra-low power, 32-bit microprocessor.

A composite **Multivariable Module 205 Sensor** is integrally mounted to the E-Chart to allow accurate determination of **differential pressure, static pressure, and temperature**. A special ribbon cable seamlessly inter-connects the E-Chart hardware and 205 module.



E-Chart Details

Specifications

32 Bit Processor
7-24 V DC @ 0.3 WATT
NEMA 7, 4X Class 1 Div. 1
Group B, C and D Housing

Display

8 Lines, 16 Characters
64x128 Pixels - Plasma
Max & Min Charting
Minutes, Hours or Days
Automatic Scrolling

Standard Interfacing

Serial Modbus
(1) Frequency Channel
(1) Analog Output
(1) Digital Input
(2) Digital Outputs
(1) Comm. Port-RS232/485
Selectable
(1) Optional Additional RS232
Port
Rosemount Multivariable-
DP, Press., & Temp.
.075 % Accuracy of
Calibrated Range

Interrogation Upgrade Options

TCP/IP Encapsulated Modbus
GSM/ Radio
Zigbee Radio
Bluetooth
Satellite
Foundation Fieldbus

Applications

Well Head Measurement
Custody Measurement
Allocation Measurement
Gas Process Plants
Plunger Control
Liquid Totalizing

Standardization

API, ISO, AGA

Units of Measurement

Metric & US Customary

Metered Products

Natural Gas (AGA8)
Process Gas (AGA8)
Superheated Steam (Steam NBS)
Liquid Products w/o
Compensation

Instrumentation

Orifice Meter (API 14.3/AGA3)
Turbine/ Freq. Meter (AGA7)
SmartCone®(Dynamic)
Other Cone Meter Types
Wedge
Annubar™
Verabar™
ISO5167
Slotted DP
Accelabar

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Technical Data- E-Chart	
POWER	
VOLTAGE RANGE	7-24 VDC
WATTAGE	0.3 WATT
OPERATING CONDITIONS	
UNITS	US or METRIC
TEMPERATURE	- 40 TO 185 °F
HUMIDITY	100%
HOUSING	NEMA 4X CLASS 1 DIV. 1
DISPLAY	-20 TO 70 °C WIDE ANGLE
FEATURES	
DISPLAY	PLASMA 8 LINES 16 CHARACTER AND GRAPHICS 64x128 PIXELS
PROCESSOR	32-BIT MOTOROLA 68332 @ 16.7 MHz
FLASH ROM	4 MB @ 70 NANO SECONDS
RAM	2 MB @ 70 NANO SECONDS
FREQUENCY INPUT	ONE (1) CHANNEL SQUARE WAVE > 3 VOLTS WAVE
MULTIVARIABLE	BUILT-IN ROSEMOUNT MULTIVARIABLE TRANSMITTER WITH DIRECT SPI DIGITAL CONNECTION. MAXIMUM UPDATE SPEED ONCE EVERY 109 MILLISECONDS. TEMPERATURE RANGE: - 200 thru 1200 F PRESSURE RANGE: 0 thru 3626 PSIG DP RANGE: 0 thru 250 inches OR 0 thru 1000 inches
ANALOG OUTPUT	ONE (1) 16-BITS OPTICALLY ISOLATED OUTPUT
DIGITAL I/O	ONE (1) DIGITAL INPUT TWO (2) DIGITAL OUTPUTS DIGITAL OUTPUTS HAVE 0.25 AMPS RATING
SERIAL COMMUNICATION	ONE (1) SERIAL PORT RS-485/RS-232 SELECTABLE ONE (1) OPTIONAL RS-232 SERIAL PORT
COMMUNICATION PROTOCOL	MODBUS
PID CONTROL	FLOW LOOP AND PRESSURE LOOP