

E-Plus

Introduction

The E-Plus is a **single meter run**, custody flow computer featuring a standard one (1) DP/Frequency meter connection, two (2) auxiliary, uncompensated, Frequency-type meter connections, and an ultra-low power, 32-bit microprocessor.

An optional **Multivariable Module 205 Sensor** may be integrally mounted to the E-Plus to allow accurate determination of **differential pressure, static pressure, and temperature.**



E-Plus Details

Specification

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

Display

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

Standard Interfacing

Serial Modbus
Status Input
(2) Frequency Inputs
(3) Analog Inputs
(1) Analog Output
(2) Switch Outputs
(2) Comm Ports-RS232/485
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)
Saturated Steam
Superheated Steam (Steam NBS)
Ammonia Vapor
Liquid Products w/ no
Compensation

Instrumentation

Orifice Meter (API 14.3/AGA3)
Turbine/ Freq. Meter (AGA7)
SmartCone®(Dynamic)
Other Cone Meters
Annubar™
Venturi
Verabar™
ISO5167
Slotted DP
Choke
Accelabar
RHM Mass Meter

Technical Data- E-Plus	
POWER	
VOLTAGE RANGE	10-28 VDC
POWER CONSUMPTION	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	TWO (2) CHANNELS SQUARE WAVE 0-6 kHz, SIGNAL > 3V SINE WAVE 0-1200 Hz, SIGNAL > 70mVp-p MINIMUM 10 uA @ 1 KOhm RESISTANCE
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 I/O	ONE (1) 16-BIT OPTICALLY ISOLATED OUTPUT THREE (3) 24-BIT ANALOG INPUTS OR ONE (1) ANALOG INPUT AND ONE (1) RTD INPUT BUILT-IN ENCLOSURE TEMPERATURE AND BATTERY VOLTAGE READINGS
DIGITAL I/O	THREE (3) DIGITAL INPUTS (0-24 VDC for Main Input and 0-5 VDC for additional two (2) inputs) TWO (2) DIGITAL OUTPUTS (Max 200mA Sourcing, 300mA Sinking with 8.2 Ohm low load protection, 8-28 VDC)
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