

# E-Lite EXP



## Introduction

The E-Lite EXP 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-Lite to allow accurate determination of **differential pressure, static pressure, and temperature**.

An **Expansion Module** may be purchased to add four (4) additional Analog Inputs, one (1) Analog Output and, three (3) Digital IO's. (Two (2) may be used for Frequency Input.)



## E-Lite EXP 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) SD Memory Slot  
(2) Analog or (1) RTD Input  
(1) Comm. Port-RS232/485  
Selectable  
(1) Optional Additional RS232 Port  
Rosemount Multivariable-  
DP, Press., & Temp.  
0.075 % 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  
Accelabar

11104 West Airport Blvd, Suite 108  
Stafford, Texas 77477 USA  
T: 281.565.1118  
F: 281.565.1119  
sales@dynamicflowcomputers.com

<b>Technical Data- E-Lite EXP</b>	
<b>POWER</b>	
VOLTAGE RANGE	7-24 VDC
WATTAGE	0.3 WATT
<b>OPERATING CONDITIONS</b>	
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
<b>FEATURES</b>	
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
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
RTD/ANALOG INPUT	ONE (1) 3-WIRE RTD INPUT OR TWO (2) 24-BIT ANALOG INPUTS (MAX. 24mA) BUILT-IN BATTERY VOLTAGE READING
SERIAL COMMUNICATION	ONE (1) SERIAL PORT RS-485/RS-232 SELECTABLE ONE (1) OPTIONAL RS-232 SERIAL PORT
COMMUNICATION PROTOCOL	MODBUS
<b>EXPANSION CARD</b>	
ANALOG INPUT	UP TO SIX (6) ANALOG INPUTS (FOUR (4) 4-20 mA and TWO (2) 0-5 Vdc)
FREQUENCY INPUT	TWO (2) CHANNELS SQUARE WAVE 0-6 kHz, SIGNAL > 3V SINE WAVE 0-1200 Hz, SIGNAL > 70mVp-p
SWITCH OUTPUT	CONFIGURABLE AS: OPEN COLLECTOR, SOURCING MODE OR PUSH/PULL Max 200 mA when Sourcing, 300 mA when Sinking 8-28 Vdc Operating Voltage
RELAY OUTPUT	DRY NORMALLY OPEN CONTACT
ANALOG OUTPUT	ONE (1) 16-BITS OPTICALLY ISOLATED OUTPUT 12-28 Vdc
PID CONTROL	FLOW LOOP AND PRESSURE LOOP