E-Lite EXP L1

Dynamic FLOW COMPUTERS
Made to Measure.

Introduction

The E-Lite EXP L1 is a **single meter run**, custody flow computer with an ultra-low power, 32-bit microprocessor. It is primarily used in **Metering** and **Well Injection Testing**.

Stack DP's may be used to increase the differential pressure range-ability and performance. Additionally, a frequency or analog signal can be accepted from a **Densitometer**.

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 L1 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
(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
Metering
Well Injection Testing
Well Head Measurement
Custody Measurement
Allocation Measurement
Gas Process Plants

Standardization
API, ISO, AGA

Units of Measurement
Metric & US Customary

Metered Products
Crude Oil (5A/6A, 6A, 23A/24A, 24A)
Refined Products (5B/6B, 6B, 23B/24B, 24B)
Specialized Products (6C, 24C)
LPG (New 23/24, Old 23/24, Old 24)
Propane/Propylene Mix
Saturated Steam
Liquid CO_2 (NIST 14)
Butadiene (ASTM 1550A/B, 1550B)
Water
Propylene (API2565)
Ethylene (API2565)

Instrumentation
Orifice Meter (API 14.3/AGA3)
Turbine/ Freq. Meter (AGA7)
SmartCone® (Dynamic)
Other Cone Meters
Annubar™
Wedge
Venturi

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Technical Data- E-Lite EXP L1	
POWER	
VOLTAGE RANGE	*7-24 VDC*
WATTAGE	*0.3 WATT*
OPERATING CONDITIONS	
UNITS	*US*
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*
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*
EXPANSION CARD	
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*