



JUMPER SETTINGS

ANALOG INPUT	JP400		JP401	JP402		JP403		JP404	
	(1-2)	(2-3)		(1-2)	(2-3)	(1-2)	(2-3)	(1-2)	(2-3)
Thermistor	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
0...5V DC	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
0...10V DC	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON
4...20 mA DC	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF

ANALOG OUTPUT1	JP700	JP701	JP702	
			(1-2)	(2-3)
0...5V DC	ON	OFF	ON	OFF
0...10V DC	ON	OFF	OFF	ON
4...20 mA DC	OFF	ON	OFF	ON

ANALOG OUTPUT2	JP704	JP705	JP703	
			(1-2)	(2-3)
0...5V DC	ON	OFF	ON	OFF
0...10V DC	ON	OFF	OFF	ON
4...20 mA DC	OFF	ON	OFF	ON

COMMUNICATION	JP501
120 Ω LOAD	ON
(RS485)	—

SPECIFICATIONS

Input Power	24V DC nominal	15...32V DC, 0.120 amps maximum, (excluding 4...20 mA)		
	Note: 18...32V DC power required for analog output			
Flow Meter Input Type	Pulse TTL	Frequency range	1 Hz...16 kHz	
		Impedance	5.8 kΩ...5V DC	
	RF Carrier	Frequency range	5 Hz...3 kHz	
		Inductance	1 mH	
		Oscillator frequency	55...65 kHz	
Temperature Input Type	Thermistor	10 kΩ		
	Current	4...20 mA		
	Voltage	0...10V DC or 0...5V DC		
Linearization	Flow meter K-factor	Number of points	2...200	
		Interpolation method	Linear	
		Correlation	Strouhal-Roshko (per ARP4990 publication)	
	Temperature	Number of points	2...50	
		Interpolation method	Linear	
	Viscosity	Number of points	2...100	
		Interpolation method	Linear	
		Correlation	ASTM D341-93, Andrades Equation or user-defined	
Density	Number of points	2...50		
	Interpolation method	Linear		
Outputs	Variables available for output	Linearized volume flow rate		
		Linearized mass flow rate		
		Flow total		
		Temperature		
		Pressure		
	Frequency (2 frequency output channels)	0...5 V TTL, 0.6...16,000 Hz		
		Transmission distance	250 ft maximum	
	Analog (2 analog output channels)	0...5V DC, 0...10V DC or 4...20 mA		
		Voltage	Linearized, scaled	
		Zero offset	Less than 5 mV	
		Current	Linearized, scaled	
		Maximum load	500 Ω maximum load resistance (4...20 mA)	
	RS485 (volume/mass flow, temperature, other)	Baud rate	115K	
		Update Rate	Selectable, 0.1 second minimum	
		Data Bits	8	
		Stop Bit	1	
		Parity	None	
Performance	Accuracy	Linearized frequency	0.1% of reading	
		Linearized analog	0.1% of full scale	
		Thermistor	±0.5° C (does not include sensor uncertainty)	
		Analog input (temperature)	16 bit A/D resolution	
	Linearization latency	0.8...2.0 ms + period of input		
Batching	2 I/O ports for control, batching, manifolding	1 input port		
		1 output port		
Environment	Temperature	Operating	−40...185° F (−40...85° C)	
		Storage	−67...257° F (−55...125° C)	
	Humidity	0...85% RH non-condensing		
	Enclosure	NEMA 4 or NEMA 4 CLI GR.CD CL II GR.EFG CL.III WET LOC. Aluminum		
Communication	Interface	RS485, serial USART connection to personal computer (with serial cable)		
	Baud	Output	115K	
		Programming	115K	
		Data Bits	8	
		Stop Bit	1	
		Parity	None	

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