

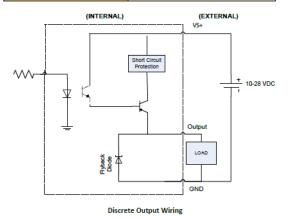
Discrete and Analog Specifications and Circuit

Discrete Input Specifications		
Number of Inputs	8 or 16	
Input Voltage Range	10-28 VDC	
Peak Voltage	40 VDC	
Input Current	1.92 mA @12 VDC 4.0 mA @ 24VDC	
Maximum Input Current	5 mA @ 28 VDC	
Input Impedance	5.6k @ 10-28 VDC	
ON Voltage Level	>12 VDC	
OFF Voltage Level	<3 VDC	
Min. ON Current	1.5mA	
Min. OFF Current	0.2 mA	
Status Indicators	Red LED for each input	
Commons	2 points	
Fuse	No Fuse	
Wires	1 of 14 AWG, 2 of 18 AWG 4 of 22 AWG	

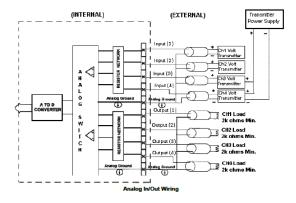
(+V) Input To Other circuit		(EXTERNAL)	(INTERN	NAL)
СОМ	(10-28	<u>+</u>		To Other circuit

Discrete Input Wiring

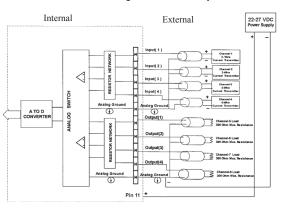
Discrete Output Specifications			
Number of Outputs	6 or 8		
Peak voltage	50 VDC		
Maximum Steady state Output Current	0.5A per Output 1.0 A max per module @ 50°C		
Maximum Leakage Current	100μA @ 50 VDC @ 50°C		
ON Voltage Drop	2 VDC @ 0.5A		
Maximum Inrush Current	0.8A for 10ms		
Status Indicators	Red LED for each output		
Short Circuit Protection	1 Amp per module, turns off outputs upon short-circuit detection		
Base power required (3.3V)	40mA, all outputs on		
Wires	1 of 14 AWG, 2 of 18 AWG 4 of 22 AWG		



Analog Voltage Circuitry



Analog Current Circuitry



	Analog Current Specifications		
	Number of Channels	4 Single Ended	
	Input Range	0-20mA or 4-20 mA DIP switch selectable	
	Resolution	12 bit (1-4096)	
	Step Response	1ms for 95% FS	
	Crosstalk	1/2 count max, -80db	
	Input Impedance	62.5Ω ± 0.1%	
Analog	Absolute Max Ratings	-30mA to 30mA	
Current	Converter Type	Successive Approximation	
Specs	Linearity Error (end to end)	± 2 counts	
Input Stability		± 1 count	
	Full-scale Calibration Error	± 10 counts @ 20mA	
	Offset Calibration Error	± 5 counts	
	Max Inaccuracy	± 0.3% @ 25°C, ± 0.6% @ 60°C	
	Accuracy vs. Temperature	± 50 ppm/°C typical	
	Recommended Fuse	.032 Amp, series 217 fast acting	
	Number of Channels	4 single ended	
	Output Range	0-20mA, 4-20mA (DIP switch selectable)	
	Output Type	Current Sourcing	
l [Resolution	12 bit (1-4096)	
Analog Current	Max. Loop Voltage	6 VDC	
Output Specs	Load/loop	0-300Ω	
	Linearity Error (end to end)	± 2 counts	
	Conversion Setting Time	100µs for FS	
	Full-scale Calibration Error	± 12 counts	
	Offset Calibration Error	± 6 counts	
	Max. Full-scale Inaccuracy (all errors included)	± 0.3%	

	Analog Voltage Specifications		
	Input Voltage Range	0-10 VDC	
	Resolution	12 bit (1- 4096)	
	Step Response	200 µs to 95% of FS	
	Crosstalk	1/2 count max, -80db	
	Input Impedence	>20 KΩ	
	Absolute Max ratings	±15V	
Analog Voltage	Converter Type	successive approximation	
Input specs	Linearity error (end to end)	± 2 count	
,,,,,,	Input stability	± 2 count	
	Gain error	± 2 count	
	Offset Calibration error	± 5 counts	
	Max Inaccuracy	± 0.2% at 25°C ± 0.4% at 0-60°C	
	Accuracy vs. Temperature	±50 ppm/°C typical	
	Output Voltage Range	0-10 VDC	
	Resolution	12 bit (1-4096)	
Analog Voltage Output specs	Conversion Setting Time	100 μs for FS	
	Crosstalk	1/2 count max, -80db	
	Peak Output Voltage	±18 VDC	
	Gain error	± 0.3% of range	
	Offset error	± 0.15% of range	
	Linearity error (end to end)	± 1 count	
	Output Stability	± 2 count	
	Load Impedance	2k Ω min.	
	Load Capacitance	0.01 microF max	
	Accuracy vs. Temperature	±50 ppm/°C typical	