ADAM-6018 8-channel Thermocouple Input Module

The ADAM-6018 is a 16-bit, 8-channel Thermocouple input module that provides programmable input ranges on all channels. It accepts Various Thermocouple inputs (Type J, K, T, E, R, S, B) and provides data to the host computer in engineering units (°C). In order to satisfy various temperature requirements in one module, each analog channel is allowed to configure an individual range for several applications.

ADAM-6018

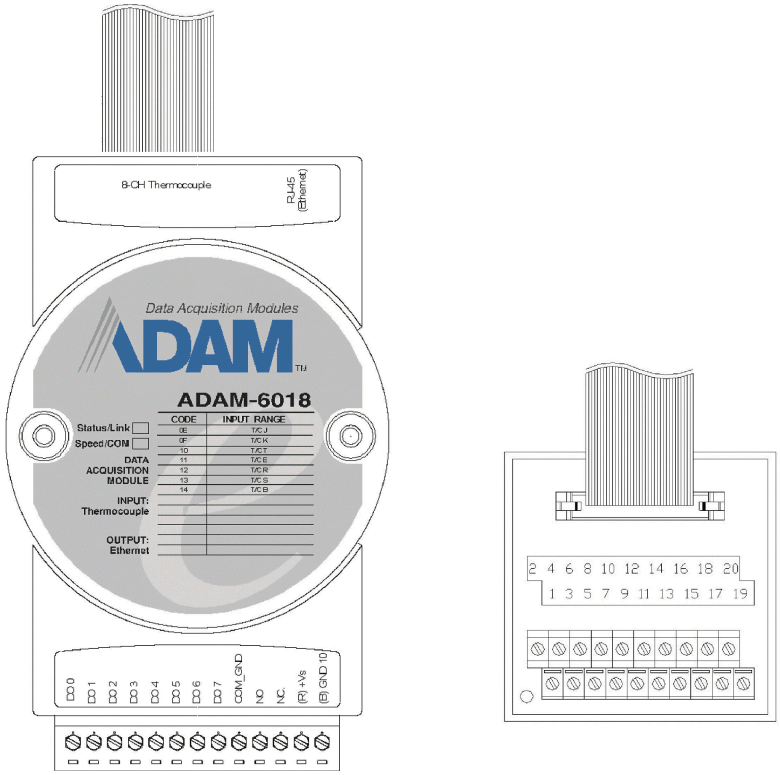

Figure 6-1: ADAM-6018 8-channel Thermocouple Input Module

ADAM-6018 Specification

Analog Input:

- **Effective resolution:** 16-bit
- **Channels:** 8
- **Input type:** J, K, T, E, R, S, B
- **Input range**:

J	0	~	760	°C
K	0	~	1370	°C
T	-100	~	400	°C
E	0	~	1000	°C
R	500	~	1750	°C

S 500 ~ 1750 °C

B 500 ~ 1800 °C

- **Output Type :** 8 channels, Open Collect to 30Vdc/100mA(max), 400mA(max) for all DO

  Isolation voltage: 2000 V_{DC}
- **Sampling rate:** 10 samples/sec.
- **Input impedance:** 10 W
- **Accuracy:** ±0.15% or better
- **Zero drift:** ±6 μV/° C
- **Span drift:** ±25 ppm/° C
- **CMR @ 50/60 Hz:** 92 dB
- **Built-in Watchdog Timer**
- **Power requirements:** Unregulated +10 ~ +30 VDC
- **Power consumption:** 2 W/Typical, 3W/max

Application Wiring

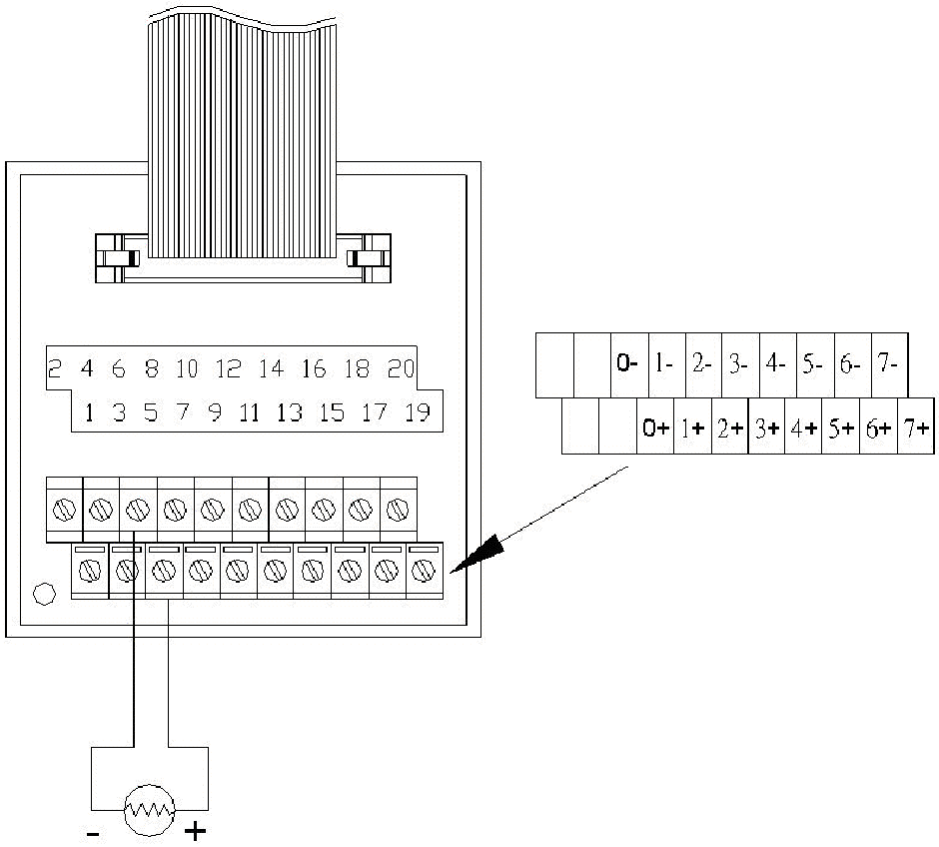

Figure 6-2: ADAM-6018 Thermocouple Input Wiring

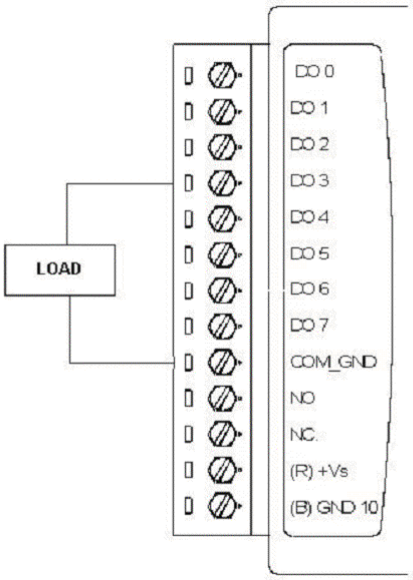

Figure 6-3: ADAM-6018 Digital Output Wiring

Assigning addresses for the ADAM-6018 Modules

ADDR 4X	CH	ITEM	Attribute	ADDR 0X	CH	ITEM	Attribute
40001	0	Real AI	R	101	0	Max Rst	R/W
40002	1	Real AI	R	102	1	Max Rst	R/W
40003	2	Real AI	R	103	2	Max Rst	R/W
40004	3	Real AI	R	104	3	Max Rst	R/W
40005	4	Real AI	R	105	4	Max Rst	R/W
40006	5	Real AI	R	106	5	Max Rst	R/W
40007	6	Real AI	R	107	6	Max Rst	R/W
40008	7	Real AI	R	108	7	Max Rst	R/W
40009	8	Avg ch0~ch7	R	109	8	Max Rst	R/W
40010				110			
40011	0	Max Val	R	111	0	Min Rst	R/W
40012	1	Max Val	R	112	1	Min Rst	R/W
40013	2	Max Val	R	113	2	Min Rst	R/W
40014	3	Max Val	R	114	3	Min Rst	R/W
40015	4	Max Val	R	115	4	Min Rst	R/W
40016	5	Max Val	R	116	5	Min Rst	R/W
40017	6	Max Val	R	117	6	Min Rst	R/W
40018	7	Max Val	R	118	7	Min Rst	R/W
40019	8	Max Val	R	119	8	Min Rst	R/W
40020				120			
40021	0	Min Val	R	121	0	BurnOutFlag	R
40022	1	Min Val	R	122	1	BurnOutFlag	R
40023	2	Min Val	R	123	2	BurnOutFlag	R
40024	3	Min Val	R	124	3	BurnOutFlag	R
40025	4	Min Val	R	125	4	BurnOutFlag	R
40026	5	Min Val	R	126	5	BurnOutFlag	R
40027	6	Min Val	R	127	6	BurnOutFlag	R
40028	7	Min Val	R	127	7	BurnOutFlag	R
40029	8	Min Val	R	129			
40030				130			
				131	0	HiAlmFlag	R
				132	1	HiAlmFlag	R
				133	2	HiAlmFlag	R
				134	3	HiAlmFlag	R
notes : CH8 stands for averagevalue from CH1~CH7				135	4	HiAlmFlag	R
empty cell is reserved				136	5	HiAlmFlag	R
				137	6	HiAlmFlag	R

	138	7	HiAlmFlag	R
	139	8	HiAlmFlag	R
	140			
	141	0	LoAlmFlag	R
	142	1	LoAlmFlag	R
	143	2	LoAlmFlag	R
	144	3	LoAlmFlag	R
	145	4	LoAlmFlag	R
	146	5	LoAlmFlag	R
	147	6	LoAlmFlag	R
	148	7	LoAlmFlag	R
	149	8	LoAlmFlag	R
	150			