



Overview

The RLVBTC8 8 Channel thermocouple interface module allows up to 8 K-type thermocouple channels to be logged by the Racelogic VBOX. The TC8 is linked via CAN bus to the VBOX and can be used in conjunction with other units such as the ADC02 analogue interface or the CAN01 vehicle CAN bus interface.



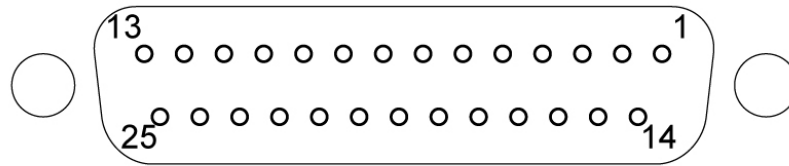
Features

- 8 * K-type thermocouple inputs
- Supports standard & extended CAN frames
- CAN data rate up to 1Mbit
- Configuration via CAN or RS232
- Timer controlled transmission or polled response

Specification

Input Channels	8 Differential input channels		
Input Signals			
Thermocouple type	K		
	-270 °C	To	1372°C
Sample rate	6Hz continual update		
Resolution	24 bit		
Accuracy	CJC within 25way D sub connector typically better than $\pm 0.3^{\circ}\text{C}$		
Isolation voltage	1000 VDC to processor		
Over voltage protection	± 35 VDC		
Common mode voltage	< 2 V		
CMR (50/60)Hz	> 92dB		
Power supply voltage	+12 VDC ($\pm 10\%$)		
CAN			
Type	CAN 2.0A or CAN 2.0B compatible		
Baud Rates	250Kbit/s 500Kbit/s 1Mbit/s		

Signal Connections



25 way socket connections

Input Connector 25 way D type female

Pin	Function	Pin	Function
1	Channel 0 (+)	14	Channel 6 (-)
2	Channel 0 (-)	15	Channel 7 (+)
3	Channel 1 (+)	16	Channel 7 (-)
4	Channel 1 (-)	17	No Connect
5	Channel 2 (+)	18	No Connect
6	Channel 2 (-)	19	No Connect
7	Channel 3 (+)	20	+12 V Sensor supply
8	Channel 3 (-)	21	No Connect
9	Channel 4 (+)	22	GND
10	Channel 4 (-)	23	CJC
11	Channel 5 (+)	24	CJC
12	Channel 5 (-)	25	CJC
13	Channel 6 (+)		