

Thermocouple Interface (RLVBTC8)



The Thermocouple Interface (RLVBTC8) allows up to 8 K-type thermocouple channels to be logged by the Racelogic VBOX.

The RLVBTC8 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

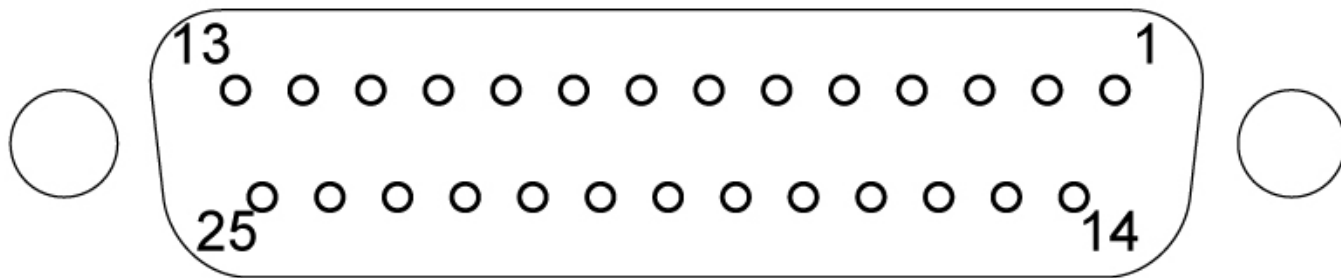
Specification	
Input Channels	8 Different input channels
Input Signals Thermocouple Type K	-270°C to 1372°C
Sample Rate	6Hz continual update
Resolution	24 bit
Accuracy Thermocouple	CJC within 25 way D sub connector typically better than $\pm 0.3^{\circ}\text{C}$
Isolation Voltage	1000 VDC to processor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

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Signal Connections



25 Way D Type Female Connector

Pin	Function	Pin	Function
1	A/D Channel 1 +	14	+Vbatt
2	A/D Channel 1 -	15	GND
3	A/D Channel 2 +	16	Isolated 5 Volt supply (+ve)
4	A/D Channel 2 -	17	Isolated 5 Volt supply (-ve)
5	A/D Channel 3 +	18	Isolated 12 Volt supply (+ve)
6	A/D Channel 3 -	19	Isolated 12 Volt supply (-ve)
7	A/D Channel 4 +	20	GND
8	A/D Channel 4 -	21	GND
9	A/D Channel 5 +	22	GND
10	A/D Channel 5 -	23	A/D Channel 8 -
11	A/D Channel 6 +	24	A/D Channel 8 +
12	A/D Channel 6 -	25	A/D Channel 7 -
13	A/D Channel 7 +		