Ideal for Desktop/Laptop use



## **DESCRIPTION**

The MicroDAQ BT-73-T/R is a data acquisition product for thermocouple temperature measurement. The unit is available with 8, 16 or 32 analog thermocouple inputs and has a 14-bit resolution.

All standard type J / K / E / T / R / S / B / C / N thermocouples are supported, providing a temperature accuracy of better than I degree. Onboard programmable digital inputs and outputs allow for control of relays or external contacts in case of an event or alarm. A special cold-junction compensation module is provided with each unit to ensure accurate temperature measurements. This plugs into the USB-73-T's DB-25 connector(s) and has screw terminals fitted for easily interfacing thermocouple wires. The BT-73-R for use with RTD PT100 or PT1000 sensors is available upon request. Please contact us for more information.

The units come supplied with a USB Wireless dongle which plugs into the PC to offer wireless communication. You can achieve a range of up to 10 metres depending on circumstances. Drivers are provided for the most popular operating systems, as well as for the WindowsCE© family of products including PocketPC2002 and PocketPC2003. This support allows the wireless MicroDAQ range to be controlled directly from a Wireless enabled palm held PC. Each unit is supplied with a WindowsCE API and control panel which is downloaded from a PC to the handheld device. Embedded Visual C++ and embedded Visual Basic examples are supplied.

The BT-73 is the perfect measurement tool for customers who wish to do temperature measurement, but do not want the hassle or investment of PLC or SCADA systems. Typical applications include monitoring of furnaces, cold storage, computer server rooms and environmental monitoring to name but a few.

## **FEATURES**

- Connects via Wireless Connection
- Thermocouple Inputs: 8, 16 or 32 Inputs
- Thermocouple Accuracy: I degree
- $\bullet \quad \text{Thermocouples Supported:Type J, K, E,T, R, S, B, C, N}\\$
- Resolution: I4-Bit A/D
- Digital I/O Lines: 24 (3x8-bits ports)
- Power: 9VDC @ 500mA (Typ)
- Supplied with a Universal Input 9VDC PSU
- Dimensions: 45 (H) x 80 (W) x 148 (L) mm (BT-73-T-8 & BT-73-T-16)
  65(H) x 80(W) x 148(L) mm (BT-73-T-32)

D	B-	25	М	DB-25M			
8.4V	14	1	AGND	PA1	14	1	PA0
+15V	15	2	AGND	PA3	15	2	PA2
CJC	16	3	AGND	PA5	16	3	PA4
-15V	17	4	AGND	PA7	17	4	PA6
CH7-	18	5	AGND	PB1	18	5	PB0
CH6-	19	6	CH7+	PB3	19	6	PB2
CH5-	20	7	CH6+	PB5	20	7	PB4
CH4-	21	8	CH5+	PB7	21	8	PB6
CH3-	22	9	CH4+	PC1	22	9	PC0
CH2-	23	10	CH3+	PC3	23	10	PC2
CH1-	24	11	CH2+	PC5	24	11	PC4
CH0-	25	12	CH1+	PC7	25	12	PC6
		13	CH0+			13	DGND













<b>Specifications</b>							
Temperature Inputs (TC)							
Input Channels:	8 / 16 / 32 (Model Dependent)						
TC Range:	±75mV						
Gain:	Hardware TC or RTD						
Resolution:	14-bit						
Input Coupling:	DC						
Input Impedance:	1M Ohm						
System Noise:	1 LSB						
Digital I/O (DIO)							
No. of TTL Lines:	24						
Logic Levels:							
Input Low Voltage:	-0.5V to 0.8V						
Input High Voltage:	2.0V to 5.0V						
Output High Voltage Min:	2.4V						
Output Low Voltage Max:	0.45V						
Maximum Output Current:	2mA						





## Ordering Information

Supplied with EDR Enhanced Software & Universal Switch Mode 9V PSU				
BT-73T8	Wireless 16 Channel 14-bit Thermocouple Input Unit, 24 DIO - incl. USB Wireless			
	Dongle; 2.4 GHz Antenna & 2 x CJC Screw Terminal Adaptor			
BT-73T16	Wireless 16 Channel 14-bit Thermocouple Input Unit, 24 DIO - incl. USB Wireless			
	Dongle; 2.4 GHz Antenna & 2 x CJC Screw Terminal Adaptor			
BT-73T32	Wireless 32 Channel 14-bit Thermocouple Input Unit, 24 DIO - incl. USB Wireless			
	Dongle; 2.4 GHz Antenna & 4 x CJC Screw Terminal Adaptors			