BT-30-73

Wireless 3 KHz 14 Bit A/D Unit with 4x D/A, 24DIO & 16 Thermocouple Inputs

Ideal for Desktop/Laptop/PDA use

BT-30-73 Back

BT-30-73 Front

DESCRIPTION

The **MicroDAQ BT-30-73** is a multi-function analog and digital I/O product which communicates to the host PC via a Wireless connection. The unit has a 14-bit resolution and is the perfect measurement device for portable, laboratory or classroom use.

The unit comes 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.

Featuring 16 analog inputs and 16 Thermocouple inputs, the unit can be used to measure voltage signals from sensors, transducers, accelerometers, Thermocouples and much more. It also features four analog outputs which can be used as reference voltages and many other applications. The digital I/O is available in 3 sets of 8 channels which can be programmed as inputs or outputs.

All standard type J / K / E / T / R / S / B / C / N thermocouples are supported, providing a temperature accuracy of better than 1 degree. A special cold-junction compensation module is provided with each unit to ensure accurate temperature measurements. This plugs into one of the SRL-30-73's DB-25 connector(s) and has screw terminals fitted for easily interfacing thermocouple wires.

The BT-30-73 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.

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 serial MicroDAQ range to be controlled directly from a palm held PC with wireless connection. 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.

FEATURES

- Wireless Interface
- 16 Single Ended Analog Input Channels
- 14-bit A/D Resolution
- 3kHz Total Sampling Speed
- Onboard 16K FIFO
- 4 x 14-bit Analog Outputs
- 24 x DIO Lines (3 x 8-bit ports)
- 16 Thermocouple Inputs
- Thermocouple Accuracy: 1 Degree
- Thermocouples Supported: Type J, K, E, T, R, S, B, C, N
- I/O Connector 4 x DB25-Male (1 for A/D, 1 for DIO & 2 for TC)
- LED Indication for power
- Ideal for Portable/Laptop use
- Housing: Plastic ABS with rubber feet
- Operating Temp: 0°C to 70°C
- O/S Support for Windows 98/ME/XP/2000 & Linux
- Includes EDRE SDK, EDRE-Labview, EDRE-Testpoint & WaveView for Windows.
- Power: Supplied with 1A 9VDC External PSU
- Power Consumption: 900mA typ. @ 9VDC
- Dimensions: 65(H) x 80(W) x 148(L) mm

Specifications

Analog Inputs (A/D)	
Input Characteristics	
Input Channels:	16 Single Ended
Input Ranges:	±2.5V ±5V ±10V 0-5V 0-10V
Gain Scale:	1 / 10 / 100
Resolution:	14-bit
Input Coupling:	DC
Max Sampling Rate:	3kHz
Clock Source:	Internal 10MHz
	External – Convert (EXT_CLK)
Gate Source:	External – Convert (EXT_GATE)
Input Impedance:	1M Ohm
System Noise:	±1 LSB
Analog Outputs (D/A)	
Output Characteristics	
Output Channels:	4
Output Range:	±10V
Resolution:	14-bit
Full Scale Error:	±2 LSB
Settling Time:	1mS to 0.1% of full scale
Output Drive	±10V @ 5mA
Power-On State:	0V
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
Temperature Inputs (TC)	
Input Channels:	16
TC Range:	±75mV
Gain:	Hardware TC
Resolution:	14-bit
Input Coupling:	DC
Input Impedance:	1M Ohm
System Noise:	1 LSB

Ordering Information

Supplied with EDR Enhanced Software & Universal Switch Mode 9V PSU	
BT-30A16-73T16	Wireless 16(SE) or 8(DIFF) Channel 3 KHz 14-bit A/D,
	4 x 14-bit DACS, 16 Channel 14-bit Thermocouple Input Unit;
	24 DIO - incl 1.8Mtr USB Cable, USB Wireless Dongle,
	2.4 GHz Antenna & 2x CJC Screw Terminal Adapters