

Ideal for Desktop/Laptop use



SRL-73T Back



## DESCRIPTION

The **MicroDAQ SRL-73-T** 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 1 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 SRL-73-T's DB-25 connector(s) and has screw terminals fitted for easily interfacing thermocouple wires.

The SRL-73-R for use with RTD PT100 or PT1000 sensors is available upon request. Please contact us for more information. Two interface versions are available for the serial MicroDAQ range, these include RS-232 models and RS-485 models. The RS-232 models are best suited for short distances (up to 30 metres) or for use with hand held PC's such as PDA's. The RS-485 models allow for long distance data transmission (up to 1200 metres). These RS-485 models are ideally suited for process control applications in a plant or industrial environment, which require long cable runs.

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 a serial port. 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 SRL-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 RS232 or RS485
- Thermocouple Inputs: 8, 16 or 32 Inputs
- Thermocouple Accuracy: 1 degree
- Thermocouples Supported: Type J, K, E, T, R, S, B, C, N
- Resolution: 14-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 (SRL-73-T-8 & SRL-73-T-16)  
65(H) x 80(W) x 148(L) mm (SRL-73-T-32)

## Specifications

### 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

### DB-25M

8.4V	14	1	AGND
+15V	15	2	AGND
CJC	16	3	AGND
-15V	17	4	AGND
CH7-	18	5	AGND
CH6-	19	6	CH7+
CH5-	20	7	CH6+
CH4-	21	8	CH5+
CH3-	22	9	CH4+
CH2-	23	10	CH3+
CH1-	24	11	CH2+
CH0-	25	12	CH1+
		13	CH0+

Thermocouple I/O

### DB-25M

PA1	14	1	PA0
PA3	15	2	PA2
PA5	16	3	PA4
PA7	17	4	PA6
PB1	18	5	PB0
PB3	19	6	PB2
PB5	20	7	PB4
PB7	21	8	PB6
PC1	22	9	PC0
PC3	23	10	PC2
PC5	24	11	PC4
PC7	25	12	PC6
		13	DGND

Digital I/O

## Ordering Information

Supplied with EDR Enhanced Software, CJC Screw Terminal Adaptor & Universal Switch Mode 9V PSU

SRL-73T8-RS232	RS232 8 Channel 14-bit Thermocouple Input Unit, 24 DIO, 2 Mtr RS232 cable & CJC Screw Terminal Adaptor
SRL-73T8-RS485	RS485 8 Channel 14-bit Thermocouple Input Unit, 24 DIO, ADPT-9, CJC Screw Terminal Adaptors
SRL-73T16-RS232	RS232 16 Channel 14-bit Thermocouple Input Unit, 24 DIO, 2 Mtr RS232 cable, 2 x CJC Screw Terminal Adaptors
SRL-73T16-RS485	RS485 16 Channel 14-bit Thermocouple Input Unit, 24 DIO, ADPT-9 & 2 x CJC Screw Terminal Adaptors
SRL-73T32-RS232	RS232 32 Channel 14-bit Thermocouple Input Unit, 24 DIO, 2 Mtr RS232 cable & 4 x CJC Screw Terminal Adaptors
SRL-73T32-RS485	RS485 32 Channel 14-bit Thermocouple Input Unit, 24 DIO, ADPT-9 & 4 x CJC Screw Terminal Adaptors
SRL-73R	Available on request