T.M.Electronics (UK) Ltd Technical Data

DATA SHEET

TMELOG 1300 Data Logger – 8 Channel Thermocouple for temperature monitoring

Description

The TMELOG 1300 is an 8 channel thermocouple data logger with USB interface which has the capability of monitoring from 1 to 160 thermocouple inputs. The TMELOG 1300 comes supplied with a USB connection lead and software.

Features

- 8 channel thermocouple Data Logger
- Measure from 1 to 160 thermocouples (using USB multiport and multiple TMELOG1300)
- Temperature measuring range of -270 to +1820˚C (thermocouple dependent)
- Automatic cold junction compensation
- High resolution and accuracy
- Fast sampling rate – up to 10 measurements per second
- USB interface

General Specifications	
Number of channels (per TMELOG1300)	8
Maximum number of channels (using multiple TMELOG1300)	160
Conversion time	100 ms (thermocouple and cold junction compensation
Temperature accuracy	Sum of ±0.2% of reading and ±0.5˚C
Voltage accuracy	Sum of ±0.2% of reading and ±10 µV
Overload protection	±30 V

General Specifications	
Maximum common mode voltage	±7.5 V
Input impedance	2 MΩ
Input range (voltage)	±70 mV
Resolution	20 bits
Noise free resolution	16.25 bits
Thermocouple types supported	B, E, J, K, N, R, S, T
Input connectors	Miniature thermocouple

PC Requirements	
Minimum	Processor: 1GHz Memory: 512 MB Free disk space: 32-bit: 600 MB: 1.5 GB Operating system: 32 or 64 bit edition of Microsoft Windows XP (SP3), Vista, Windows 7 or Windows 8 (not Windows RT) Ports: USB 2.0 compliant port
Recommended	2 MΩ

Physical Properties	
Dimensions	201 x 104 x 34 mm (7.91 x 4.09 x 1.34 in)

Software	
For Windows	Data Logger software can collect up to 1 million samples. Features include: Multiple views – view data as a graph, spreadsheet or text Parameter scaling – convert raw data into standard engineering units Math functions – use mathematical equations to calculate additional parameters Alarm limits – program an alert if a parameter goes out of a specified range IP networking – transfer measurements via a LAN or over the internet
Linux drivers	32-bit drivers

General	
Additional hardware (supplied)	USB 2.0 cable, user manuals, software CD-ROM
PC interface	USB 1.1
Power requirements	Powered from USB port