DB101 Two-Channel Ethernet Thermocouple Data Logger

Datasheet

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2 Product Description

The Data Badger Thermocouple Data Logger allows high resolution temperature information to be measured and made available on a network, independently of a computer. Freeing parameter measurement from a computer terminal offers great flexibility compared with existing data logger systems and allows simplified design of complex distributed control systems.

Data is accessed either through the BadgerView application or using the DataBadger API with the user's own software. BadgerView allows collected data to be accessed from a number of DataBadger devices for display and logging. The use of simple CSV file formats allows easy import and data analysis using the user's favourite application. BadgerView is free for use with a single device and can support multi-device logging with a software license.

3 Applications

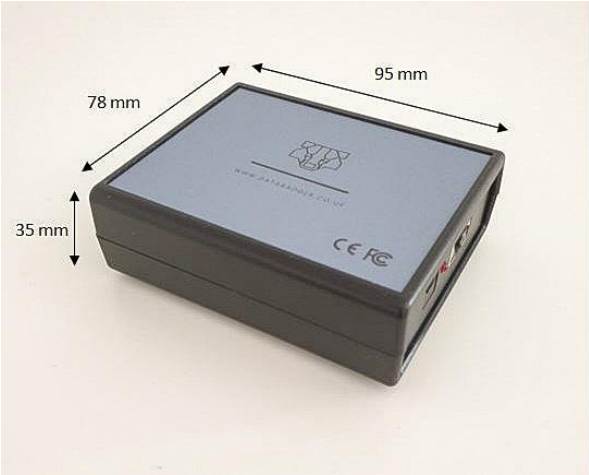
- Data logging
- Distributed control systems
- Remote sensing
- Industry 4.0 systems
- Data access via the World Wide Web
- Data Badger products can be combined to form full control system

3.1 Benefits and Features

- Two channel thermocouple data logger with Ethernet interface
- Temperature resolution of 0.01 °C
- Measurement accuracy of ±0.15%
- Measurement rage of -210 °C to +1800 °C, with suitable thermocouple
- Measurement rate up to 10 Hz, including cold-junction compensation
- Units available to support all standard thermocouple types (K, J, N, S,E, T, R, and B)
- Selectable 50 Hz or 60 Hz mains noise rejection to ensure data integrity
- Internal cold-junction compensation and thermocouple linearization
- Thermocouple or two-point calibration
- Ethernet interface allows remote data access from anywhere
- Ethernet interface supports DHCP or static IP assignment
- 5Vdc power supply @ 0.2A

4 Device Specification

Hardware	
Data channels per unit	2 thermocouple + 2 cold junction
Temperature accuracy	±0.15%
Temperature resolution	0.01 °C
Mains filter frequency	50 Hz or 60 Hz (selectable)
Thermocouples supported (1 type per unit)	K, J, N, S,E, T, R, and B
Internal sampling rate	10 Hz (all channels)
Operating ambient temperature	-20 °C to +80 °C
Operating relative humidity	5 % to 80 % non-condensing
Measurement temperature range	-210 °C to +1600 °C
Device Dimensions (LxWxH)	94.5 mm x 77.3 mm x 32.0 mm
Device weight	0.1 kg
Ingress protection	IP40
Connectors	2 x mini thermocouple 1 x 10/100 Ethernet 1 x 2.1 mm DC jack
Software	BadgerView is available free for use with a single device. See: www.databadger.co.uk/software



5 Contact & Support

For all enquires please contact: admin@databadger.co.uk

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