

DT8

dataTaker®

Handheld Data Logger

Intelligent Data Logging Solutions

- Low Cost, Low Power, Portable Data Logger
- 8 High Resolution Channels (16 Bit)
- Measures Voltage, Current, Temperature and more
- Graphical Display with built in analysis functions
- Display Real Time or logged measurements
- Setup via Keypad or PC
- Samples up to 4,000 samples per second
- Large data storage (512K)
- Rechargeable battery
- Built in help and user notes



Specifications

The *dataTaker DT8* Portable, Low Cost, Graphical Display Unit

The *dataTaker DT8* is a battery operated data logger capable of sampling, processing and displaying measurements without connecting to a computer. The *DT8* is a cost effective, compact and stand alone data logging system that can be used in a wide variety of applications.

The powerful, yet simple to use, graphical display and analysis functions allows the user to view data collected from voltage, current, temperature and user defined inputs. On screen text editing of the large display allows users to add additional information to the collected data. Data can be viewed as measured values, graphs, meters or tables.

A built-in clock keeps track of date and time. Multiple logging of up to 100 sessions can be downloaded via a fast USB communications channel. Powerful analysis software is also provided free with the *dataTaker DT8*.

The *dataTaker DT8* is ideal for use as a mobile measuring device for industrial environments with its high resolution Analog to Digital converter (ADC).

The *DT8* is the answer to your portable, high resolution yet low cost data logging requirements.



Applications include:

- Temperature monitoring
- Research and development
- Food and drug storage conditions
- Automotive testing
- Quality Assurance
- Portable environmental monitoring
- Plant and machine condition monitoring
- HVAC
- Plant trouble shooting
- Field monitoring stations
- Water quality testing
- Portable environmental monitoring

FREE
Software &
Technical
Support

Australasia

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Specifications

Inputs

- 8 differential inputs
- Selectable type for each input: 0-24mA, 0-50mV, 0-10V, NTC, PT-100, Thermocouple, Pulse and frequency (Input 1 only)

0-24mA

Range: 0-24mA
Resolution: 0.47µA
Accuracy: $\pm 0.5\%$ FS
Loop impedance: 195Ω

0-50mV

Range: 0-50mV
Resolution: 3µV
Accuracy: $\pm 0.5\%$ FS

0-10V

Range: 0-10V
Resolution: 200µV
Accuracy: $\pm 0.5\%$ FS
Input impedance: 125KΩ

Temperature NTC

NTC: 10/100K resistor
Range: -25 – 150°C
Resolution: 0.05°C
Accuracy: $\pm 0.5\%$ FS

Temperature PT-100 RTD

Range: -200 – 400°C
Resolution: 0.1°C (7m)
Accuracy: $\pm 0.5\%$ FS

The DT8 offers up to 8 PT-100 2 wire channels or 4 PT-100 3 wire Channels

Temperature thermocouple J

Range: -200 – 1200°C
Resolution: 0.1°C (1µV)
Accuracy: $\pm 0.5\%$ FS
Cold junction compensation error: $\pm 0.5^\circ\text{C}$

Temperature thermocouple K

Range: -250 – 1200°C
Resolution: 0.1°C (1µV)
Accuracy: $\pm 0.5\%$ FS
Cold junction compensation error: $\pm 0.5^\circ\text{C}$

Temperature thermocouple T

Range: -200 – 400°C
Resolution: 0.1°C (1µV)
Accuracy: $\pm 0.5\%$ FS
Cold junction compensation error: $\pm 0.5^\circ\text{C}$

Internal temperature

Range: -25 – 70°C
Resolution: 0.1°C (1µV)
Accuracy: $\pm 0.5\%$ FS

Pulse counter (Input 1 only)

Optocoupler input
Range: 0-65,000
Input signal: 0-5V
Input impedance: 470Ω
band width: 0-50hz

Frequency meter (input 1 only)

Optocoupler input
Range: 20-4,000Hz
Input signal: 0-5V
Input impedance: 470Ω

General A to D specifications

Noise: 30µV rms
Internal linearity error: $\pm 0.08\%$ of FSR
Offset error: 0.1%

Open collector output (Output 8)

Maximum current sink: 50mA (fuse protected)
Input impedance: 50Ω

Communication

USB 1.1 compliant

Sampling

Capacity: 512KB
Analog sampling rate: Variable,
1 sample/hour to 4,000 samples/sec, 1 channel
Analog sampling resolution: 16 bits

Man Machine Interface

- Full keyboard operation - enables manual programming of the logger
- Graphic LCD 64x128 pixels

Power Supply

- Internal rechargeable 7.2V NiCa battery
- Built in battery charger
- External 9V to 12V DC input
- Battery life: 40 hours between charges

Operating Temperature Range

0 to 50°C

Casing

Plastic ABS box
Dimensions: 182x100x28 mm
Weight: 450gr

Standards Compliance

CE, FCC C-Tick

Analysis Software

- Running on Windows 98/2000/ME/XP and NT
- Fast data download from the *dataTaker DT8*
- Data displayed in numeric or graphical display forms
- Graphical analysis tools such as Zoom and Cursors
- Storage of selected data on disk files
- Hard copy printing of the collected data
- Direct data export to EXCEL
- On-line retrieval and display of data in real-time
- Incorporating data processing functions
- Setting up the *dataTaker DT8*
- Calibrating the *dataTaker DT8*
- Defining new sensors.

Ordering Information

Part number Description

PRODT8 *dataTaker DT8* data logger,
Includes soft copy user manual,
carrying case, AC/DC adapter
DTLab Windows analysis software,
USB communication cable



dataTaker®

Your local distributor



Warranty: The *dataTaker DT8* is warranted against faulty materials or workmanship for twelve months. For repairs carried out under warranty, no charge is made for labour, materials or return carriage.

Quality Statement: Datataker operates a Quality Management System complying with ISO9001:2000. It is Datataker's policy to supply customers with products which are fit for their intended purpose, safe in use, perform reliably to published specification and are backed by a fast and efficient customer support service.

Trademarks: *dataTaker* is a registered trademark of Datataker Pty Ltd.

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