

Pint-sized but powerful.

Datataker data loggers by Data Electronics

Datataker 1000
temperature logger

Datataker 2000
temperature, humidity &
dewpoint logger

Datataker 3300
electric current &
temperature logger

Datataker 4000 series
universal input loggers



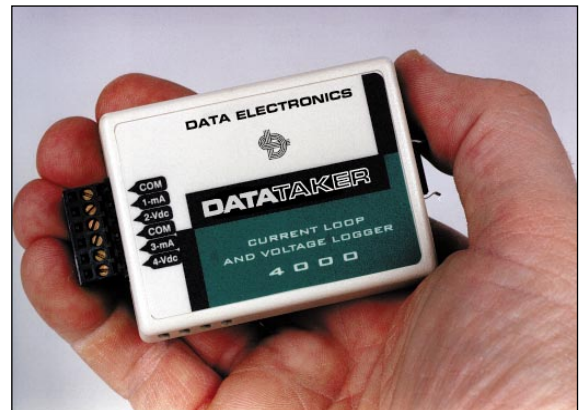
Datataker 1000 Two input channels — one for on-board ambient temperature plus one for optional remote temperature probe



Datataker 2000 Two on-board input channels — one for relative humidity, one for ambient temperature



Datataker 3300 Three input channels for polyphase monitoring of electrical and equipment load profiles



Datataker 4000 series 5, 4, 2 and 1-channel models for analog voltage and current loop signals

The **Datataker 1000-4000** family comprises advanced palm-sized, self-powered data loggers, software and accessories that offer state-of-the-art convenience, accuracy and reliability.

All Datataker loggers feature non-volatile EEROM memory so you can be assured your data is well protected. And with Windows-based software, logger setup is simply a matter of completing a dialog box.

Once you've gathered your data, detailed graphs, charts and print-outs are just a few easy keystrokes away.

- Set scale factors, engineering units, sampling intervals, logging modes, delayed start functions and much more.
- Display data in either graphical or tabular format.
- Zoom in on areas of graphs for a closer look, and overlay data for comparisons.

A weatherproof enclosure and other accessories are available — see "Ordering" overleaf.

The Datataker family of loggers measures temperature, humidity, dewpoint, electric current, and analog current loop and voltage signals — see "Specifications" overleaf.

General Features

- Powerful yet easy to use
- 12-bit resolution for outstanding accuracy and sensitivity
- Bullet-proof non-volatile memory protects your data
- Data automatically converted into familiar engineering units
- Self-powered for long-term worry-free performance
- Palm-sized for convenience and unobtrusive mounting

DATATAKER

• Data Logging/Recording • Data Acquisition • RTU

Specifications

All Loggers

Size	71mm x 53mm x 18mm
Weight	60g
Enclosure	Injection-moulded ABS plastic
Mounting	Magnetic strips on back
Operational temperature range	-40 to +85°C, 0 to 95% RH (non-condensing)
Power	Internal lithium battery 3.6V, 10-year life at ≥1min sampling (factory replaceable)
ADC	12 bits (one part in 4096)
Memory	Non-volatile 32K EEROM, data retention >20 years without power
Data samples	21,500 12-bit samples at user-selectable rates from 10sec to once per day
Clock accuracy	±1min per month over full operating range
PC interface	Serial port (half-duplex, 19200 baud)
Internal ambient temperature sensor	
Sensor	Precision-calibrated NTC thermistor
Accuracy	±0.25°C at 25°C, better than 0.5°C over -30 to +50°C
Resolution	0.05°C at 25°C, better than 0.2°C over -30 to +50°C
Response time	<1 min in slowly moving air
Optional remote temperature sensor	
Description	General purpose temperature probe, flat-ended aluminium tip, 3m leads
Sensor	Precision-calibrated NTC thermistor
Range	-50 to +150°C
Accuracy	±0.25°C at 25°C, better than 0.5°C over -30 to +50°C
Resolution	0.05°C at 25°C, better than 0.2°C over -30 to +50°C
PC software	Windows 95 or NT

Datataker 1000 Temperature Logger

SP-1000	2 channels (1 channel for monitoring on-board ambient temperature and 1 channel for optional remote temperature probe)
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Datataker 2000 Temperature, Humidity & Dewpoint Logger

SP-2000	2 channels (1 channel for relative humidity and 1 channel for ambient temperature, both sensors on-board)
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Relative humidity sensor

Sensor	Capacitive thermoset polymer-based monolithic integrated circuit, temperature-compensated over entire range
Range	0 to 100% RH
Accuracy	±2% RH over 10 to 90% RH at 25°C
Resolution	0.05% RH
Repeatability	0.5%, 0 to 75% RH
Stability/drift	±1% RH typical at 50% RH in five years
Hysteresis	±0.8% of span (maximum)

Datataker 3300 Electric Current & Temperature Logger

SP-3300	4 channels (3 channels for AC current and 1 channel for on-board ambient temperature)
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Current channels

Selectable ranges	A65FL probe 5, 25, 100 and 250A A75FL probe 0, 50, 250 and 500A
Maximum voltage	660V AC (insulated wire)
Accuracy	±4% FS ±0.4A
Current probe output	0 to 260µA DC

Contact your Datataker representative for more information:

J & S Instruments, Inc.
3071 State Route 72 South
Springfield, Ohio 45505-5023
Phone: (937) 325-7499
Fax: (937) 323-9588

Datataker 4000 Universal Input Loggers

Analog voltage inputs

Input impedance	>1Mohm (0 to 1V, 0 to 10V ranges)
Accuracy	1V and 10V ranges: ±0.15% FS at 25°C
Resolution	1V and 10V ranges: 0.0025V DC
Overload protection	±30V, reverse-polarity protected

Current loop inputs

Range	0 to 22mA
Input impedance	50 ohms
Overload protection	60mA maximum, reverse-polarity protected

Models in the 4000 series

SP-4000	5 channels (2 channels for monitoring 0-1V or 0-10V DC signals, software switchable; 2 channels for monitoring 4-20mA signals; 1 channel for on-board ambient temperature)
SP-4000-50T	5 channels (4 channels for monitoring 0-10V DC signals and 1 channel for on-board ambient temperature)
SP-4000-410	4 channels for monitoring 0-10V DC signals
SP-4000-4CC	4 channels for monitoring 4-20mA signals
SP-4000-4CW	4 channels for monitoring 4-20mA signals plus XPS excitation switch on channels 1 and 3
SP-4000-3T1	3 channels (2 channels for monitoring 0-1V or 0-10V DC signals, software switchable; 1 channel for on-board ambient temperature)
SP-4000-210	2 channels for monitoring 0-10V DC signals
SP-4000-2CC	2 channels for monitoring 4-20mA signals

Ordering

Loggers (order software and cable separately)

Datataker 1000

2-channel data logger	SP-1000
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Datataker 2000

2-channel data logger	SP-2000
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Datataker 3300

4-channel data logger (current probes not included).....	SP-3300
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Datataker 4000 series

5-channel data logger - voltage, current and temp.....	SP-4000
5-channel data logger - voltage and temp.....	SP-4000-50T
4-channel data logger - voltage	SP-4000-410
4-channel data logger - current.....	SP-4000-4CC
4-channel data logger - current plus XPS.....	SP-4000-4CW
3-channel data logger - voltage and temp.....	SP-4000-3T1
2-channel data logger - voltage	SP-4000-210
2-channel data logger - current.....	SP-4000-2CC

Software and Cable (required for configuring logger and downloading data)

Datataker software and computer-to-logger cable	PC-SFW-IC
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Optional Accessories

Weather-proof enclosure (IP66 polycarbonate)	AC-ENC-01
Remote temperature probe (3m lead length).....	EPT-010
Computer-to-logger cable	PC-IC

Datataker 3300 clamp-on current probes

A65FL 50Hz 0-250A AC	EPC-250-50
A75FL 50Hz 0-500A AC	EPC-500-50



Data Electronics' Datataker data loggers meet or exceed the following electromagnetic emissions and susceptibility requirements: CISPR 11 Class B, IEC 1000-4-2, IEC 1000-4-3



Due to continual product improvement, Data Electronics reserves the right to alter the specifications of these products without notice.

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