

DICKSON

SP325 & TP325

Logger Operation

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SP325
Self Contained
Temperature



TP325
Temperature & Humidity

Product Applications

Dickson's Pro Series Temperature Data Logger now feature a LCD display and push-to-start! The new SP325 & TP325 feature high speed USB connectivity, user replaceable battery, a current min/max display, and convenient push-to-start functionality setting a new standard in accurate, easy -to -use, affordable PC based recording.

Product Features

- 1 year battery life
- Stores 32,000 sample points
- Push-to-Start
- Digital Display
- Compact size, fits in the palm of your hand

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Product Specifications

SP325

Operating Range (unit):	-4 to +158°F (-20 to +70°C) (non-condensing)
Internal Temp. Sensor:	Internal digital temperature sensor
Internal Temp. Accuracy:	±1.2°F (±0.67°C)
IP Rating	IP20
Storage Capacity:	32,512 points
Resolution:	1°F/1% RH
Dimensions:	1.34" x 3.08" x 2.25" (3.4 cm x 7.8 cm x 5.7 cm)
Minimum DicksonWare Version Required:	11.0

TP125

Operating Range (unit):	-4 to +158°F (-20 to +70°C) (non-condensing)
Internal Temp. Sensor:	Internal digital temperature sensor
Internal Temp. Accuracy:	±0.8 °F (±0.5°C) over range +20 to +120°F (-6 to +48°C), ±1.8°F (±1.0°C) < +20°F (-6°C) and > +120°F (+48°C)
IP Rating	IP20
R/H Sensor Type:	Monolith RH IC sensor
% R/H Accuracy:	±2% RH at 0% to 60% RH; ±3% RH at 60% to 95% RH, non-condensing
Storage Capacity:	16,256 per channel
Resolution:	1°F/1% RH
Dimensions:	1.34" x 3.08" x 2.25" (3.4 cm x 7.8 cm x 5.7 cm)
Minimum DicksonWare Version Required:	11.0

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Getting Started

To setup your SP325 or TP325 you'll need to be at your PC.

1. Install DicksonWare v.11 or higher Software on your PC.
 - a. Windows 98 or higher is required.
 - b. DicksonWare v.11 or higher is required. If you currently have DicksonWare on your PC, check the version by choosing Help and About from the menu bar.
 - c. To install and start DicksonWare Software onto your PC, insert the CD into the CD drive. Installation will start automatically.
2. Connect the cable (supplied with the software) to the logger and to a working USB port on your PC
 - a. When using the USB connection, your computer may detect the logger when the logger is powered on and connected to the computer via the USB connection. Depending on your version of Windows, the computer may go through and Add New Hardware routine. (A computer restart is not required)
3. To setup your logger, launch DicksonWare by double clicking on the DicksonWare icon.
 - a. Click on the large SETUP Icon. A window will pop up asking you to select either a Serial or USB connection. Select the USB option and click on the Continue button.
 - b. Setup data will now appear in a new window. All fields should be automatically filled in; this will confirm that DicksonWare has recognized the logger. Should the fields remain blank, verify that you have the correct version of DicksonWare installed on your PC. Also, detach then re-attach the USB cable to restart the USB channel. Once DicksonWare recognizes the logger, press the Clear button. This will delete all data currently stored.
 - c. The logger is now sampling and ready for use. Verify that the display is showing current readings. You may choose to change Default settings for the following:

Setting	Default	Options	Location
Sample Interval	1 minute	1 sec. up to 24 hrs	Setup/Samples
Start-date and Time	No Delay	Press Button to Start or Start After Delay	Setup/Samples
Stop or Wrap When Full	Stop	Wrap	Setup/Samples
Degree F or C	Deg. F	Deg. C/K or Raw	File/Preferences
Display Scroll	Current	Current/Min/Max	Setup/Display
User ID	Model #	User Defined	Setup/Identification
Sub Ten Second Interval	Disabled	Enabled	Setup/Samples
Humidity	RH	Dew Point or Raw	File/Preferences

- d. When changing setting for sample interval, sub ten second sample interval, stop or wrap when full and start-date and time, the logger will automatically go through the clear process to accept changes.

Note: To conserve battery life when storing unit, select Stop When Full from the Setup/Samples section or remove the battery.

Display/Push to Start

The display will remain blank when Press Button to Start has been selected in Setup but logging has not yet begun.

If the display is flashing the unit is not logging.

Min/Max Display

- There are two display options: Current Readings only or Current/Min/Max scroll, which can be selected under Setup/Display.
- To reset Min/Max readings on the display, a paper clip or toothpick should be used to depress the Min/Max Clear button located on the back of the unit. This will not clear logged data.

Press Button to Start

- This feature needs to be selected when the logger is setup (Setup/Samples). Hold down the start button on the front of the unit for 1 second. The display will turn on. The logger is now logging. Pressing the button again will not stop logging.

Battery

- The battery is a user replaceable lithium DL123 or CR123 battery. At a 2 minute sample rate, the battery should last 1 year. More frequent sampling and/or operating unit at extreme ranges will shorten battery life.

DicksonWare™ Software Specifications

- Microsoft Windows® compatible
- Allows for simple viewing and zooming of logged data
- Easy set-up of Dickson Data Loggers including:
 - User selectable sample intervals from 1 seconds to 24 hours
 - Display temperature in °C or °F
 - Delayed logger start times
 - Logger data capacity can be set to wrap data or stop when full
 - Allow for real time monitoring and graphing.
 - Effortless exporting of data and graphs to other software
 - Data can be viewed in tabular (numeric/table) or graphical formats
- Fast downloading of logged data - 30 seconds (typical) from full logger
- Even shows battery power status for battery operated loggers

Specifications:

Compatible With: Microsoft Windows® 98, 2000, NT & XP

PC Requirements: PC with 486 MHz or faster microprocessor, 4 MB RAM (A015), 16 MB RAM (A016/A026/A025), 1 free COM (serial) port

with dedicated interrupt (A015/A025) or 1 USB root hub (A016/A026), CD drive, VGA monitor or better
Cable Type/Length: 9 pin male D-shell to male 2.5mm stereo plug, 6' long

Computer Interface: RS-232 serial (COM) port or USB

DicksonWare™ Version Required (minimum): 9.0

DicksonWare™ SECURE Software Specifications

To ensure the authenticity, integrity and confidentiality of data, 21CFR Part 11 requires that electronic records adhere to certain criteria. DicksonWare™ SECURE software collects data from our validated data logger, creates detailed graphs and reports and contains the following features that comply with 21CFR11:

- Password protection
- Electronic signature consisting of User ID and Password
- Collected data encrypted in secure files
- Audit trail capability to identify date, time, user and action

For a complete 21CFR11 compliant package, order the following:

Description	Order #
1. Appropriate Validated data logger	
2. DicksonWare™ SECURE Software & Serial or USB Download Cable	A025 or A026
3. Certificate of Validation/logger	N520
4. Choose One Calibration Option Listed Below:	
NIST Traceable Calibration 3-pt. (new unit)	N300
NIST Traceable Calibration 1-pt. (new unit)	N100
A2LA Accredited Calibration 3-pt. (new unit)	N400

Note: SW400 Calibration Software may not be used with DicksonWare™ SECURE software.

Prices are subject to change without notification.

Specifications:

Compatible With: Windows® 98, 2000, NT & XP

PC Requirements: 386MHz processor or higher, 4MB RAM, 1 free COM (serial) port, CD drive

Cable Type/Length: A025: 9 pin male D-shell to male 2.5mm stereo plug, 6" long;

A026: USB male series "A" plug to 5-pin male series "B" mini plug, 6' (2 meters)

Operating Range: -20 to +135°F, 0 to 95%RH (non-condensing)

Computer Interface: RS-232 COM (serial port)

Accessories (for current pricing go to www.dicksonweb.com or call 1-800-323-2448)

Software	Order #
DicksonWare™ Software and Serial Download Cable	A016
Logger Calibration Software	SW400
Calibrations	
NIST Traceable Calibration 3-pt (new unit)	N300
NIST Traceable Calibration 1-pt (new unit)	N100
A2LA Accredited Calibration 3-pt. (new unit)	N400
Certificate of Validation	N520

Frequently Asked Questions

Sample Interval: The Sample Interval determines how frequently the data logger will save a reading. Using DicksonWare™ Software, the user can set a Sample Interval ranging from 1 seconds to 24 hours in 1 second increments. A temperature logger with data storage of 32,512 set at a 10 second Sample Interval will record for 3.75 days, while the same logger set at a 1 minute Sample Interval will record for 22.5 days.

Data Storage: Data Storage is the number of Sample Points a data logger can hold. These models have a sample rate of 32,000. A temperature logger with Data Storage of 32,512 and a sample interval set at 30 seconds would record for 11.25 days, while a temperature logger with Data Storage of 7,680 and the same sample interval would record for only 2.6 days.

Does it have to stay connected to a PC in order for it to work? No. Unless you're viewing data in real-time you only connect the logger to a PC when you want to view / retrieve data.

What happens when all the storage space is taken up? Do I have to throw it away?

After you have downloaded the data, you simply "clear" the logger and it is ready to log more data.

What happens if I leave it monitoring somewhere too long? The Data Loggers have two user selectable modes, Stop and Wrap. In Stop mode, they will quit logging data when the memory is full. In Wrap mode, the Logger will begin to overwrite the oldest data in its memory.

Where can I put them? Depending on the Dickson model, just about anywhere. We have waterproof units, stainless steel models, units with probes, and units that handle extreme temperatures. Our wide selection of instruments should fit about any application.

What is the biggest advantage of a Data Logger? Its data is "logged", stored on a microchip inside the Data Logger. Data in electronic memory takes advantage of the power of a PC and software.

- * Store the data as you would store any document on your PC.
- * Retrieve archived data as easily as opening a file on your PC.
- * Share the data as you would any PC file, email, copy and paste.
- * Data can be imported into spreadsheet software and word processing documents.
- * Easily import data from multiple data loggers onto a single graph.

How are they mounted? The smallest ones, about the size of a pager, can be wall-mounted with Velcro or simply set anywhere you need to monitor. The larger units have keyhole slots for wall mounting and can also stand on their own.

Calibration Services - New Units

N100 - NIST Traceable Calibration 1-Point: Includes documentation to one Dickson pre-selected point on new units only.

N300 - NIST Traceable Calibration 3-Point: Includes documentation of three Dickson pre-selected points (a high, medium, and low) on new units only.

N400 - Deluxe A2LA Accredited NIST Traceable Calibration 3-Point: ISO Guide 25/A2LA Documentation of 3 pre-selected points of as found data before and after calibration for Dickson temperature and/or humidity instrumentation on new units only.

N995 - NIST User Selected Temperature Points: Documentation of one customer specified point. Should be selected in addition to one of the above calibration options.

The Importance and Benefits of Regular Calibrations

Once you begin to use your precision Dickson instrumentation, regular calibrations are necessary to ensure accurate readings.

The following Calibration Services are available:

N150 - NIST Traceable Calibration 1-Point: Includes documentation to one Dickson pre-selected point after re-calibration.

N350 - NIST Traceable Calibration 3-Point: Includes documentation of three Dickson pre-selected points (a high, medium, and low) after re-calibration.

N450 - Deluxe A2LA Accredited NIST Traceable Calibration 3-Point: ISO Guide 25/A2LA Documentation of 3 pre-selected points of as found data before and after calibration for Dickson temperature and/or humidity instrumentation.

N995 - NIST User Selected Temperature Points: Documentation of one customer specified point. Should be selected in addition to one of the above calibration options.

Why should I recalibrate my instrumentation?

Over time dirt, dust and normal handling can throw your precision instrumentation out of calibration. Regular calibrations ensure that you receive the most accurate readings possible.

How often should I recalibrate my instrumentation?

Depending on the environment your instrument is used in and how often it is handled you will want to recalibrate your instrument every 6 to 12 months. Instruments in environments where there are extreme temperatures, wide temperature ranges, humidity or pressure variations, high condensation, dirt, dust and other debris will require calibration at least every 6 months. Instruments that are frequently moved or in locations with heavy machinery that cause vibrations should also be calibrated at least every 6 months.

Why should I return my instrument to Dickson for calibration?

Dickson calibrates your instrument at the factory using proprietary production/calibration software that guarantees proper calibration.

Our Capabilities

Dickson is the first manufacturer of humidity and temperature instrumentation to receive A2LA accreditation. We are also NIST Traceable; our procedures conform to MIS-STD-45662A, ANSI/NCSL 2540-1-1994, ISO/IEC Guide 25 and ISO10012. We are experts in the manufacture and calibration of humidity and temperature instruments.

Fast Service: Our turnaround time is 3 days or less so you receive not only expert service but fast service as well.

Easy: We make it easy for you! No phone calls for Return Authorization Numbers are required. We remind you when your instrument is due for calibration. You simply send in the completed Calibration Order Form with your unit for calibration with freight prepaid to Dickson.

Troubleshooting

For troubleshooting information, click [here](#) for the technical support page.

Warranty

Dickson warrants that the products it sells will be free from defects in material and workmanship under normal use and service for a period of twelve months after delivery. In the event of a claim under this warranty, the product or part must be returned to the factory for repair or replacement (shipping pre-paid) with a Return Authorization Number (see Return Information above). It will be repaired at Dickson's option without charge. This warranty DOES NOT cover routine calibration, pen, chart and battery replacement. The foregoing warranty and remedy are exclusive and in lieu of all other warranties either expressed or implied. Dickson shall not be liable for consequential or incidental damages resulting from failure or malfunction of its products. Dickson makes no warranty for products not manufactured by it or for any products modified by buyer, or subject to misuse or neglect.

Factory Service & Returns

Contact the factory (630-543-3747) for a Return Authorization (RA) Number before returning any instrument. The model number, serial number and a purchase order number will be requested before an RA number is issued.

- Carefully repack the instrument, label the outside of the box with the RA# and return the instrument (freight pre-paid) to Dickson.
- All instruments that do not have the RA# clearly marked on the outside of the box will be refused. When returning instruments for credit, please include all accessories in shipment.
- Calibration/Freight charges are non-refundable.

NOTE: Dickson shall not be liable for consequential or incidental damages resulting from failure or malfunction of its products.

Customer Satisfaction

Dickson takes pride in providing you, the customer, with the highest quality instrumentation. We welcome the opportunity to help you in any way possible. Whether it be a question or a new idea in documentation, the Dickson Company would like to hear your response. Please call our Customer Service Department at 1-800-323-2448 or (630) 543-3747 (in Illinois).

Software Return Policy

IMPORTANT-Read your Software License Agreement carefully before installing software. Dickson will accept returns for replacement of defective disks and CDs only.

DICKSON

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