DICKSON

SP125/175 & TP125
USB Logger Operation

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Product Applications

Dickson's SP/TP series of USB data loggers set a new standard in accurate, easy-to-use, affordable PC based recording. Due to their compact size, rugged design and battery power they can be placed just about anywhere. Monitor temperature or temperature and humidty with models that come equipped with either an internal sensor for reading air temperatures, or both an internal and external sensor for reading temperatures in extreme environments or hard to reach places.

Product Features

- 1 year battery life
- Stores 32,000 sample points
- SP175 features a remote temperature range of -238 to +2000°F (-150 to +1039°C)
- High/Low LED Alarm
- Delayed start
- Unit on LED indicator
- Compact size, fits in the palm of your hand

Other Useful Features

- **Delayed Start -** Program how many Days, Hours and Minutes must expire before your unit begins logging.
- **Real Time Monitoring -** Monitor and graph your process as it happens and print and save from real time screen. (This feature should be used sparingly as it causes the battery to drain quicker)
- **Customize Graphed Data -** DicksonWare™ calculates Min, Max and Average of all data collected. Customize data by eliminating unnecessary data points and customize Min, Max and Average to show only desired information.
- **Export Data -** A snapshot of your graph or a real-time graph of points can be easily exported to other programs such as Excel™ or PowerPoint™.

Click on the features button in the software for detailed instructions on how to use above features

Product Specifications

	SP125	SP175	TP125
Operating Range (unit):	-10 to +176°F (-23 to +80°C) (non-condensing)	-10 to +176°F (-23 to +80°C) (non-condensing)	-10 to +176°F (-23 to +80°C) (non-condensing)
Internal Temp. Sensor:	Digital Sensor	Digital Sensor	Digital Sensor
Internal Temp. Accuracy:	±1.2°F	±1.8°F	±0.8°F
External Temp. Range:		-238 to +2000°F (-150 to +1039°C)	
External Temp. Accuracy:		±1.8°F Full Range (unit only)	
IP Rating	IP20	IP20	IP20
% R/H Accuracy:			±2% @73°F (0 to 95%)
Storage Capacity:	32,512 points	16,256 per channel	16,256 per channel
Resolution:	0.1°F	0.1°F	0.1°F / 0.1% R/H
Minimum DicksonWare Version Required: (for all models)		10.0	

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Getting Started

- Install the DicksonWare™ Software.

- Connect the cable (supplied with the software) to the logger and to a working UBS port on your computer.

- Click the Setup button. When the setup window appears, all fields should be automatically filled in, this will confirm that DicksonWare™ has recognized the logger. Should all fields remain blank, refer to "No Communication" in the Trouble Shooting section of this manual. Once DicksonWare™ recognizes the logger, press the Clear button. This will delete all data currently stored.

- The logger is now sampling and ready for use. The default sample interval is 1 minute. Verify that the indicator light is flashing every 10 seconds. You may choose to change Default settings for sample interval and start-date and time. When changing these settings, the logger will automatically go through the clear process to accept your changes.

- The LED will flash red when the unit is set-up for delayed start

NOTE: To conserve battery life when storing unit, press the Setup button and select the shortest Sample Interval and Stop When Full in the Samples section or remove the battery.

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 10 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® 95, 98, 2000, NT & XP

- **PC Requirements**: PC w/486MHz or faster microprocessor, 16 MB RAM, 1 free USB root hub, CD drive, VGA Monitor or better

- **Cable Type/Length:** USB male series "A" plug to 5-pin male series "B" mini plug, 6' (2 meters)

- **Computer Interface:** USB

- **DicksonWare™ Version Required (minimum):** 10.0

Accessories (for current pricing go to www.dicksondata.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**

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Cases	
Locking Wall Mount Case	**A715**
Waterproof Pouch	**A713**
Probes & Cables	
4" Piercing Probe, 5' Coiled Cable, +1650°F, +900°C (316 Stainless Steel)	**D605**
5" Immersion Probe, 5' Coiled Cable, +1650°F, 900° (316 Stainless Steel)	**D608**
6" High Immersion Probe, 6' Straight Cable, +2100°F, +1148°C (316 Stainless Steel)	**A203**
K-Thermocouple 100' Straight Extension Cable	**A202**
K-Thermocouple 10' (3.05m) Straight Extension Cable	**D617**
Angled Surface Probe w/ Mini Connector	**D606**

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.

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.

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

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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.

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SP125/175 & TP125
Operación del Registrador USB

Introducción

- Instale DicksonWare™ (compatible con Windows® 98 o más alto). Se requiere DicksonWare Versión 10 o más alta requerida.

- Si ya tiene Dickson Ware en su ordenador, verifique la versión seleccionando "Ayuda" y "Acerca de" desde el menú de la barra para verificar que versión tiene instalado y asegurarse que cumple con los requisitos del registrador.

- Inicie DicksonWare™ usando el icono que está en el escritorio.

- Conecte el cable (suministrado con el software) al registrador y a un puerto Serial COM o USB que este funcionando en su ordenador.

- Pinche el botón de configuración. Le indicará que seleccione el puerto USB o Serial COM, seleccione su conexión y presione "Continué". Aparecerá una ventana de configuración, y todos los campos deberían llenarse automáticamente. Esto confirma que DicksonWare™ ha reconocido al registrador. El registrador esta tomando muestras a partir de este momento.

- El LED destellará intermitentemente en color verde para confirmar que el registrador está tomando muestras.

Importante Saber

- Cuando se cambia la configuración del registrador (intervalo de muestreo y fecha y hora de inicio) el registrador borrará toda la información almacenada automáticamente.

- Para extender la vida de la batería durante la operación, use una frecuencia de muestreo menos frecuente y desconecte la unidad del puerto USB o serial cuando no esté bajando data.

Fahrenheit/Centígrados
El registrador de datos tiene como por defecto la captura de temperatura en grados Fahrenheit. Si desea ver datos registrados en el futuro en el grafico o en la tabla en grados Centígrados, vaya a "Archivo," "Preferencias" y luego cambie la selección de temperatura.

- Para cambiar al configuración de la pantalla, por favor vea la sección de Alarma del manual.

Cambio de la Batería
El monitor de nivel de batería en la pantalla de "Configuración" muestra el voltaje de la batería y una advertencia de batería baja cuando es requerido que sea cambiada.

Remueva la batería del porta-batería deslizando la batería hasta que salga, utilizando un lápiz u otro utensilio pequeño. Reemplace la batería con una de tipo Litio CR2450 o DL250, con el lado + hacia arriba.

Cuando se está cambiando la batería, el registrador no recolecta datos sin embargo no se pierde información de la memoria. Para reiniciar la recolección de muestras, baje la data y luego limpie la memoria.

La garantía Dickson

Dickson garantiza que esta línea de instrumentos estará libre de defectos materiales y de mano de obra bajo condiciones de uso y servicio normales, por un período de doce meses desde el momento de su entrega.

Esta garantía no cubre calibración de rutina ni reemplazo de batería.

Para Especificaciones y Soporte Técnico vaya a www.DicksonData.com

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Opération du dispositif d'enregistrement USB

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Débuter

- Installez DicksonWare™ (compatible avec Windows® 98 ou supérieur). Version DicksonWare requise: 10 ou supérieure est requis.

- Si vous disposez déjà de DicksonWare dans votre ordinateur, vérifiez la version en cliquant sur "Help" et "About" dans la barre de menu pour vérifier la version dont vous disposez et assurez-vous qu'elle est conforme aux exigences du dispositif d'enregistrement.

- Lancez DicksonWare™ par l'icône sur votre dessus de bureau.

- Connectez le câble (fourni avec le logiciel) au dispositif d'enregistrement et à un port série en état de fonctionner, COM ou USB, dans votre ordinateur.

- Cliquez sur le bouton Setup. Vous serez invités à sélectionner le port USB ou COM Série, sélectionnez votre connexion puis cliquez sur Continue. Une fenêtre de configuration apparaîtra et tous les champs seront automatiquement remplis. Cela confirmera que DicksonWare™ a reconnu le dispositif d'enregistrement. Ce dernier commencera alors l'échantillonnage.

- La diode LED clignotera au vert pour confirmer que le Opération du dispositif d'enregistrement a commencé l'échantillonnage

A savoir

- Lors de la modification des paramètres du dispositif d'enregistrement (intervalle de mesure, date et heure de début), l'enregistreur effacera automatiquement toutes les données stockées.

- Pour obtenir une plus longue durée de vie de la pile durant l'opération, utilisez un intervalle de mesure moins fréquent et déconnectez l'unité du port USB ou COM série lorsque vous ne téléchargez pas de données.

Fahrenheit/Celsius
L'enregistreur de données est réglé par défaut pour enregistrer des données en Fahrenheit. Si vous désirez changer l'unité de mesure sur le graphique ou la table, allez dans "File," "Preferences" puis modifiez la sélection de température.

- Veuillez consulter la section Alarme du manuel pour modifier les réglages d'affichage.

Remplacement de la pile
Le moniteur du niveau de la pile de l'écran "Setup" affiche la tension de la pile et une alarme de pile faible lorsqu'un remplacement est nécessaire.

Retirez la pile de son support en faisant sortir la pile, avec un crayon ou tout autre petit outil. Remplacez la pile par une pile Lithium CR2450 ou de type DL2450, le pôle positif vers le haut.

Lors du remplacement de la pile, l'enregistreur de données ne collectera pas de données mais la mémoire ne sera pas perdue. Pour recommencer l'échantillonnage, téléchargez les données puis effacez la mémoire.

La garantie Dickson

Dickson garantit cette ligne d'instruments sans défauts en matériel ou en main-d'oeuvre sous usage et service normal pour une période de douze mois à compter de a livraison.

Cette garantie ne couvre pas l'étalonnage de routine et le remplacement de la pile.

Veuillez visiter le site www.DicksonData.com pour des spécifications et l'assistance technique.

SP125/175 & TP125
Betrieb des USB Loggers

Erste Schritte

- Installieren Sie die DicksonWare™ Software (Windows® 98- oder aufwärtskompatibel). DicksonWare Version 10 oder höher erforderlich.

- Falls sich die DicksonWare Software bereits auf Ihrem PC befindet, so schauen bitte Sie in der Menüleiste unter „Hilfe" und „Über .." nach, um welche Version es sich handelt und vergewissern Sie sich, dass die Software die Vorraussetzungen des Loggers erfüllt.

- Öffnen Sie die DicksonWare™ Software mittels des auf Ihrem Desktop befindlichen Icons.

- Verbinden Sie das Kabel (wird zusammen mit der Software ausgeliefert) mit der Registriereinrichtung und einen an Ihrem Rechner befindlichen funktionsfähigen Seriellen COM oder USB Anschluss.

- Klicken Sie auf den Button „Einrichten". Sie werden dazu aufgefordert, einen USB oder Seriellen COM Anschluss auszuwählen. Wählen Sie daraufhin Ihren Verbindungstyp aus und klicken Sie auf „Weiter". Ein Fenster zum Einrichten der Software erscheint, woraufhin sämtliche Felder automatisch ausgefüllt werden sollten. Dies ist eine Bestätigung, dass die DicksonWare™ Software den Logger erkannt hat. Der Logger ist jetzt dabei, Daten zu erfassen.

- Zum Bestätigen, dass der Logger gerade Daten erfasst, blinkt die LED grün auf.

Wissenswertes

- Wenn Sie die Konfiguration des Loggers ändern (Erfassungsintervalle sowie Starttermin und –zeit), löscht der Logger automatisch alle gespeicherten Daten.

- Zur Erhöhung der Batterielebensdauer verwenden Sie bitte eine geringere Erfassungsfrequenz und entfernen Sie den Geräteanschluss aus dem USB oder Seriellen Anschluss, wenn Sie keine Daten herunterladen.

Fahrenheit/Celsius

Der Datenlogger erfasst Daten standardmäßig in Fahrenheit. Falls Sie künftig die erfassten Daten oder die grafische Darstellung in Celsius ansehen möchten, so wählen Sie bitte unter „Datei" die Menüoption „Präferenz" aus und ändern Sie dann die Temperaturauswahl.

- Informationen zum Ändern der Einstellungen des Displays finden Sie unter dem Abschnitt „Alarm" in der Gebrauchsanleitung.

Austausch der Batterie

Wenn ein Austauschen der Batterie erforderlich wird, zeigt der Überwachungsbildschirm des Aufladezustands der Batterie auf dem Bildschirm „Einrichten" den Spannungszustand der Batterie und einen Warnhinweis bzgl. des niedrigen Batteriespannungszustands an.

Entfernen Sie die Batterie aus Ihrer Halterung, indem Sie die Batterie unter Verwendung eines Bleistifts oder eines anderen kleinen Gegenstands nach Außen schieben. Ersetzen Sie die Batterie mit einem Lithium CR2450 oder DL2450 Modell; +Seite nach oben.

Während des Austauschens der Batterie erfasst der Logger keine Daten, diese gehen jedoch nicht verloren. Zum erneuten Starten der Datenerfassung laden Sie die Daten herunter und löschen danach den Speicher.

Die Dickson Gewährleistung

Dickson garantiert, dass die Produktlinie dieses Instruments hinsichtlich Material und Verarbeitung bei standardmäßigem Gebrauch und Service frei von Mängeln ist.

Diese Garantie deckt keine routinemäßigen Kalibrierungen und Austausch von Batterien.

Genauere Angaben sowie Hinweise zum Technischen Support finden Sie unter www.DicksonData.com.

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Funzionamento USB del Logger

Per iniziare

- Installare DicksonWare™ (compatibile con Windows® 98 o successivo). È richiesta la versione 10 o superiore di DicksonWare™..

- Se DicksonWare è già installato sul PC verificarne la versione selezionando "Help" ed "About" dalla barra di menu bar e assicurarsi che la versione sia compatibile con i requisiti del logger.

- Attivare DicksonWare™ cliccando l'icona che si trova sul desktop.

- Collegare il cavo (fornito con il software) al logger ed a una porta operativa seriale COM o USB del computer.

- Fare clic sul pulsante Setup. Sarà chiesto di selezionare la porta USB o COM seriale, ed una volta fatto cliccare Continue. Apparrà la finestra Setup, in cui tutti i campi sono compilati automaticamente. Questo conferma che DicksonWare™ ha riconosciuto il logger. Il logger sta ora eseguendo le letture.

- Il LED verde lampeggerà per confermare che il Logger sta rilevando letture.

Informazioni indispensabili

- Quando si modificano le impostazioni del logger (intervallo fra le letture e data ed ora d'inizio) il logger rimoverà automaticamente tutti i dati memorizzati.

- Allo scopo di ottenere una maggiore durata della batteria durante il funzionamento, usare una frequenza di lettura inferiore e sconnettere l'unità dalla porta seriale o USB quando non si stanno scaricando dati.

Fahrenheit/Celsius

Il data logger è predisposto per la registrazione dei dati in gradi Fahrenheit. Se si vogliono leggere futuri dati registrati sul grafico o sulla tabella in gradi Celsius selezionare "File," "Preferences" e quindi cambiare la selezione delle unità di misura di temperatura.

- Per modificare le impostazioni del display, consultare la sezione Allarme del manuale.

Sostituzione della batteria

Il monitor di livello batteria sul display "Setup" visualizza la tensione della batteria e l'avviso di batteria scarica quando è necessario sostituirla.

Estrarre la batteria dal suo alloggiamento facendola scorrere fuori, usando una matita o un altro dispositivo minuscolo. Sostituire la batteria con una batteria al Litio di tipo CR2450 o DL2450; + all'insù.

Nella sostituzione della batteria il logger non raccogliere dati ma i dati registrati in memoria non andranno

persi. Per iniziare nuovamente le letture, scaricare i dati e poi cancellare la memoria.

La garanzia Dickson

Dickson garantisce che questa linea di strumenti sarà priva di difetti di materiale e manodopera nelle condizioni normali d'uso e di servizio per il periodo di dodici mesi dalla consegna.

Questa garanzia non copre la calibrazione di routine e la sostituzione della batteria.

Per informazioni tecniche ed assistenza tecnica accedere al sito www.DicksonData.com