



# **DICKSON** **insights**

Summer 2014 ■ CD280

## **+** **PHARMA** **STORAGE SPOTLIGHT**

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# At Your Service

Letter from the Editor.

MICHAEL K. MILLER • DICKSON INSIGHTS EDITOR-IN-CHIEF

**D**ickson has customers from all walks of life. Pizza connoisseurs, piano experts, and camel milk gurus all use our temperature, temperature and humidity, and pressure monitors to better understand their work. Pretty cool, no? We converse with a surfeit of industries so often, that some of you probably get lost in our focus.

So I, and we, want to know who you are, and what we can do better for you. At Dickson, instead of sticking your request in a "requests" bin, only for it to sit there for 6 weeks before anyone sees it, and then when they do see it, transfer the suggestion to somebody else for 6 more weeks, who then transfers it to the right individual, which by the time your request is answered, you may have already forgotten about . . . we handle things a bit differently.

On my end, I can research and distribute information that will be helpful for you. I can create articles, infographics, photos, and guides that you want.

If you need something else, like product support, I can walk a couple of yards down the hallway and say hello to the people you will be talking to.

Have a product feature recommendation? I hang out with our engineering department on such a frequent basis they have to be very sick of me by now.

Whatever your needs are as our customer, we want to get you that satisfaction that so many companies promise. We just need a little of your help to get started.

So . . . we'd like to hear from you! No matter your position or company size, if you are interacting with our products, let's talk. My email is [content@dicksondata.com](mailto:content@dicksondata.com). I look forward to emailing you back.



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## Data Loggers:

# The Vaccines For Children Program

In the July edition of our catalog, we provided some resources for Vaccines for Children (VFC) Providers, specifically pointing to our blog (have you visited it yet?) for some links and general information you must know to be a provider in the program. In the August edition, we talked about vaccine storage; namely the differences in state requirements, state recommendations, CDC requirements, and CDC recommendations for temperature sensors and calibrations, and how to wade through all those differences. This time, we are talking about another sector of vaccine storage: data loggers.

At the moment, you may be monitoring your vaccines with a chart recorder. That's not above the call of duty anymore. While we and other temperature monitoring device manufacturers used to recommend chart recorders for vaccine storage, we don't anymore. Why? Chart recorders are an old technology no longer suited for vaccine storage. Today, hospitals and clinics understand just how much temperature fluctuations affect a vaccine's potency, and the limitations of a chart recorder don't fall in line with the importance of keeping vaccines safe.

Right now, the CDC does not require participants in the VFC program to use data loggers to monitor vaccines. As we discussed last month, the CDC and most state VFC programs only require their clinics to check the temperatures of their vaccines twice a day, reading the temperatures off of a temperature sensor.

But, data loggers are the future. The CDC currently recommends you monitor your vaccines with a data logger. We've heard from both CDC advisors and VFC providers that regulations are moving towards the requirement of clinics using a data logger.

Data loggers are devices that record temperature over time. What they fundamentally allow clinics and hospitals to do, is prove that their vaccines were kept at the correct tempera-

tures. Not only that, but they allow you to set alarms, generate reports, and better understand your place in the vaccine cold chain.

The biggest issue for most clinics and hospitals is the cost associated with switching to data loggers. We think this is silly. Why? It's simple: the cost of having to throw away VFC vaccines and replace them, or revaccinate children is much, much, much more than a data logger. Right?

So let's say that your state has decided to distribute grants for data loggers, require data loggers, or you just feel like getting ahead of the regulation game. What should you look for in a data logger? We've generated the following checklist just for you on the features your data logger should have before you buy:

- Display current and minimum and maximum temperatures
- Have a reset button
- Have user-selectable alarms



- Have a remote probe submersed in a Glycol bottle (Check out last month's post!)
- Loop all recorded data

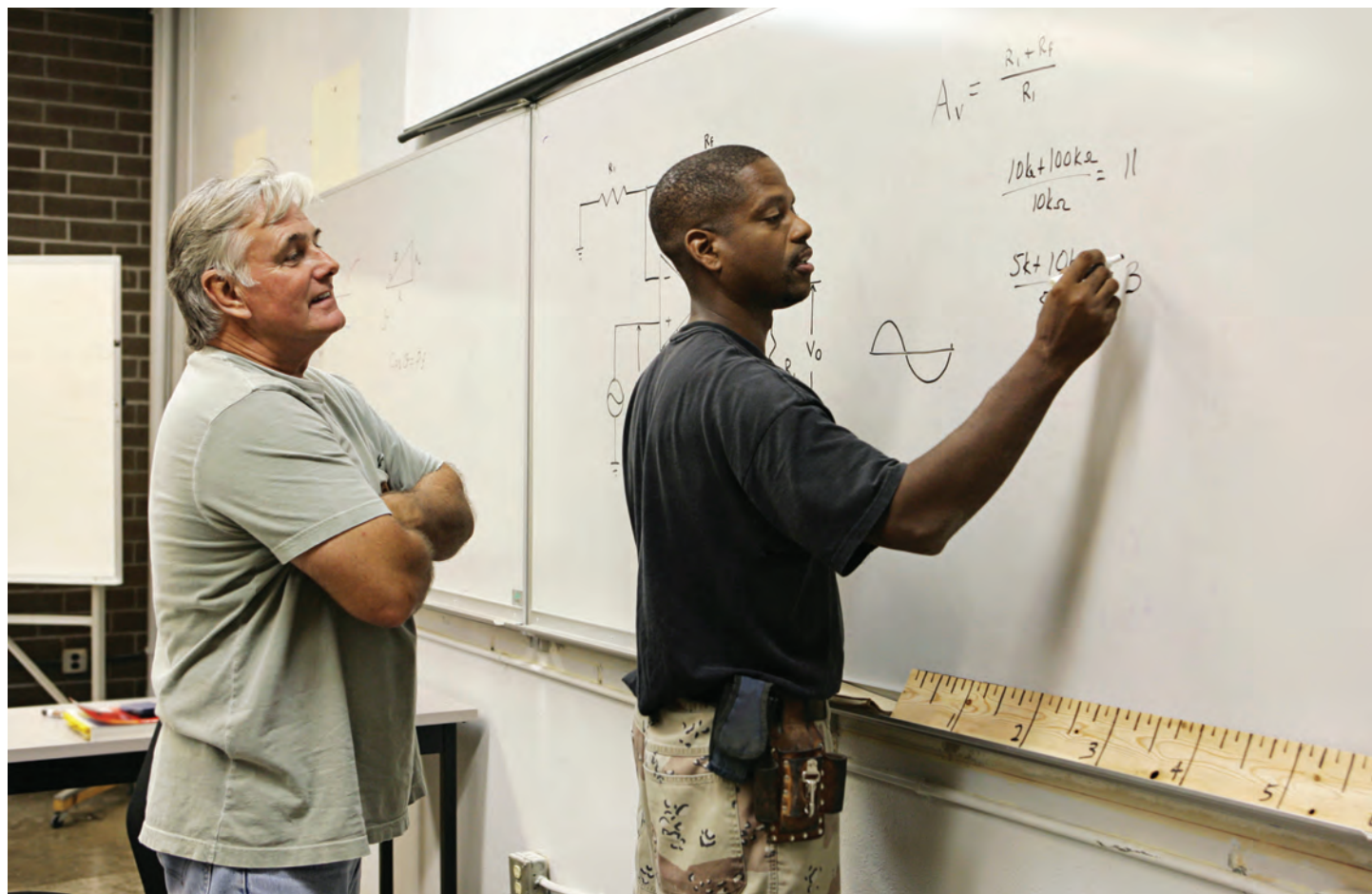
### DICKSON VACCINE MONITORING PRODUCTS

**DicksonOne** Page 10-12  
Wireless, Real-time Monitoring. Meets all CDC recommendations for vaccine storage.

**Touchscreens** Page 8  
All your data at the touch of a finger. Glycol-encased Replaceable Sensor. Perfect for VFC monitoring.

## GOT QUESTIONS? ASK AN EXPERT!

# 630.543.3747



## Continuing Education: The World Of Manufacturing

Whether you're fresh out of college or trade school, or have been on the job for 30 years, gaining a new skill and learning about new technologies, processes, and theories in the manufacturing world will only benefit your career. Below we've provided some ways to further your career. For links to specific web-pages, organizations, and other resources, visit our blog, at [blog.dicksondata.com](http://blog.dicksondata.com).

**Classes:** You could take a class! Check out your local community college, trade school, or university to see if they are offering classes on topics and subjects that would benefit your career. That can mean brushing up on your knowledge of Microsoft Excel, or learning about the ways in which lean manufacturing is affecting the shift in the development of new factories overseas. There are also online classes, many of which allow you to work at your own pace, and some that are completely free!

**Conferences:** Trade shows and conferences are usually places that present up-to-date studies and regulation information on the manufacturing world. You not only learn about the latest innovations in your industry, but also about new ways in which companies are becoming more efficient by continually improving their processes. Also, you get to network with experts in your industry. This face-to-face time with your manufacturing peers is an incredible resource of knowledge. Talking with the people in your industry will enlighten you in many ways to simply, be better at your job.

**Social Media:** Hop on twitter, LinkedIn, or Facebook (and follow/like us while you are at it!). There is so much happening on social media these days, much more than #thatawkwardmomentwhen and spam bots. You can brush up on the news each morning, read important articles in the manufacturing world, and keep

up to date on what our favorite industry insiders are saying about the manufacturing landscape.

**Industry Specific Options:** What do we mean by "Industry Specific Options?" It's a reminder to constrict what you decide to pursue in continuing education. There are only 168 hours in a week. If you find yourself signing up for a continuing education classes that is only sort of beneficial to the advancement of your career, that's time wasted on something that could be really valuable. Our best advice is to narrow your focus to the manufacturing industry that you inhabit.

As we stated above, for specific twitter accounts, trade shows, conferences, classes, and other continued learning options, visit our blog. We have more space to write there!

# The Dickson Blog

Find more information about environmental monitoring on our blog: [Blog.DicksonData.com](http://Blog.DicksonData.com).



## 3 Tools to Measure Mean Kinetic Temperature

We outline and provide three tools to help you measure your mean kinetic temperature.



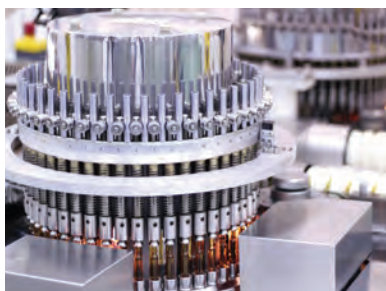
## 10 Tools to Become the MacGyver of your Healthcare IT Team

Shave money off your budget with these tips.



## Lessons in Networking and DicksonOne

Learn about networking, routers, modems. Oh, and some information on DicksonOne, of course.



## The Best Pharmaceutical Blog Posts of 2013

Our favorites, bookmarks, saved-for-laters from the Pharma world in 2013.



## The Cloud, Cold Chain, and Validation

We put together a presentation on validating your piece of the cold chain.



## How to Evaluate a New Data Logger

How is new technology impacting data loggers and what should you look for in a monitoring device? We've got some questions to ask yourself before buying.



Dickson Replaceable Sensors

Recalibration Made Easy

THE OLD WAY

1.

Call or order a recalibration online.
2.

Acquire a Return Authorization Code from a Dickson Representative.
3.

Take unit and probe out of their environment.
4.

Shut down production/storage area if necessary.
5.

Install backup system.
6.

Box unit up.
7.

Ship it to Dickson.
8.

Dickson recalibrates the unit and ships it back.
9.

Receive the unit.
10.

Reinstall system.

Total Down Time: 7-10 Days

THE NEW WAY

1.

Call or order a Replaceable Sensor online.
2.

Receive Replaceable Sensor.
3.

Take old sensor off, put new sensor on.

Total Down Time: 0 Days



MODEL	PROBE TYPE	TEMPERATURE RANGES	ACCURACY	PRICE
TEMPERATURE/HUMIDITY				
R200	Digital Sensor	-40° to 185°F (-40° to 85°C)	±0.8°F, 20 to 120°F (±0.44°C, -6.67 to 48.89°C)	\$69
R250	Digital Straight Sensor	-40° to 185°F (-40° to 85°C)	±0.8°F, 20 to 120°F (±0.44°C, -6.67 to 48.89°C)	\$69
TEMPERATURE				
R300	Digital Sensor	-22° to 122°F (-30° to 50°C)	±0.8°F, 20 to 120°F (±0.44°C, -6.67 to 48.89°C)	\$49
R350	Digital Straight Sensor	-22° to 122°F (-30° to 50°C)	±0.8°F, 20 to 120°F (±0.44°C, -6.67 to 48.89°C)	\$49
R400	K-Thermocouple	300° to 2000°F (-184° to 1093°C)	±1.8°F, -22 to 122°F (±1°C, -30 to -50°C)	\$49
R500	Thermistor in Glycol Bottle	-58° to 158°F (-50° to 70°C)	±0.9°F, -58 to 68°F (±0.5°C, -50 to 20°C)	\$69
R525	Stainless Steel Thermistor	-40° to 300°F (-40° to 149°C)	±0.8°F, -20 to 176°F (±0.44°C, -28 to 80°C)	\$69
R600	Platinum RTD	-148° to 350°F (-100° to 176°C)	±0.5°F, -148 to 350°F (±0.3°C, -100 to 176°C)	\$199
R700	Dual K-Thermocouple	300° to 2000°F (-184° to 1093°C)	±1.8°F, -22 to 122°F (±1°C, -30 to -50°C)	\$99
R800	Dual Thermistor in Glycol Bottles	-58° to 158°F (-50° to 70°C)	±0.9°F, -58 to 68°F (±0.5°C, -50 to 20°C)	\$69

# Environmental Monitoring For Every Application

## 1. Report Logger

We decided to make the best compact data logger on the market, our **RL200**. With a new outer case, user selectable logging times, and redesigned PC interface, it's exactly what you need.



## 2. Touchscreen Handheld Indicator

**TC700/TH700** Instant temperature or temperature/humidity data. No-slip silicone cover. Battery powered.

299 \$

## 3. Waterproof High Temperature Data Logger

**HT300** Waterproof, High Temperature Data Logger. HACCP and FDA Compliant. USB Download. IP68 Rating. Temperature Range -40° to 257°F (-40° to 125°C).

349 \$



# TOUCHSCREEN DATA LOGGERS

## Full Control At Your Fingertips.

No running back to your PC to view your data. Jumbo 4.9" x 6.4" touchscreens. Zoom and scroll with the touch of a finger. Audible/visual alarms. USB and FLASH card data download. Rechargeable Backup Battery. Optional Display Lock. Replaceable Sensor Compatible.



MODEL	REMOTE PROBE	PROBE TYPE	TEMPERATURE RANGES	ACCURACY	RELAYS	PRICE
TEMPERATURE/HUMIDITY						
FH625	Optional	Temp/RH PCS*	-40°F to 185°F (-40° to 85°C)	±0.8°F, ±0.45°C	▪	\$489
FH635	Optional	Temp/RH PCS*	-40°F to 185°F (-40° to 85°C)	±0.8°F, ±0.45°C		\$529
TEMPERATURE						
FT600	Optional	Temp PCS*	0 to 122°F (-17° to 50°C)	±0.8°F, ±0.45°C	▪	\$399
FT620	1	KT/C	-300°F to 2000°F (-184° to 1093°C)	±1.8°F, ±1°C		\$449
FT630	2	KT/C	-300°F to 2000°F (-184° to 1093°C)	±1.8°F, ±1°C		\$499
FT625	▪	Thermistor	-40°F to 300°F (-40° to 148°C)	±0.8°F, ±0.45°C		\$449
FT640	1	Thermistor/Glycol	-40°F to 158°F (-40° to 70°C)	±0.9°F, ±0.5°C		\$469
FT645	2	Thermistor/Glycol	-40°F to 158°F (-40° to 70°C)	±0.9°F, ±0.5°C		\$489
FT660	▪	RTD	-148°F to 350°F (-100° to 176°C)	±0.5°F, ±0.28°C		\$549

\*Pre-Calibrated Sensor



# Temperature and Temperature/Humidity Data Logging Solutions

Data loggers are cost effective solutions for monitoring countless applications. With solutions for the food, pharma, manufacturing and dozens of other industries, Dickson's data loggers get you your data how you want it.



1



2



3



4

- 1 **SM300 \$249** Temperature Logger. Range -4 to 158°F, -20 to 70°C. Accuracy  $\pm 0.8^\circ\text{F}$ ,  $\pm 0.44^\circ\text{C}$ .  
**SM320\* \$299** Temperature Logger. Remote Probe. Range with Probe -300 to 2000°F, -184 to 1093°C. Accuracy  $\pm 1.8^\circ\text{F}$ ,  $\pm 1.0^\circ\text{C}$ .  
**SM325\* \$399** Temperature Logger. Two Remote Probes. Range with Probe -300 to 2000°F, -184 to 1093°C. Accuracy  $\pm 1.8^\circ\text{F}$ ,  $\pm 1.0^\circ\text{C}$ .  
**SM420 \$499** Temperature Logger. Remote Probe. Range with Probe -50 to 350°F, -45 to 176°C. Accuracy  $\pm 0.5^\circ\text{F}$ ,  $\pm 0.28^\circ\text{C}$ .  
**TM320 \$299** Temperature and Humidity Logger. Range -4 to 158°F, -20 to 70°C. Accuracy  $\pm 0.8^\circ\text{F}$ .  
**TM325 \$399** Temperature and Humidity Logger. Remote Probe. Range -40 to 185°F, -40 to 85°C. Accuracy  $\pm 0.8^\circ\text{F}$ .
- 2 **SP125 \$119** Temperature Logger. Accuracy  $\pm 1.2^\circ\text{F}$ ,  $\pm 0.67^\circ\text{C}$ . Range -10 to 176°F, -23 to 80°C.  
**SP175 \$229** Temperature Logger with Thermo-couple Probe. Accuracy  $\pm 1.8^\circ\text{F}$ ,  $\pm 0.1^\circ\text{C}$ . Range -300 to 2000°F, -30 to 50°C. A203 Probe required for +500°F.  
**TP125 \$199** Temperature and Humidity Logger. Accuracy  $\pm 0.8^\circ\text{F}$ ,  $\pm 0.45^\circ\text{C}$ . Range -10 to 176°F, -23 to 80°C.
- 3 **SP425 \$159** Temperature Logger. Digital Display. Accuracy  $\pm 1.2^\circ\text{F}$ ,  $\pm 0.67^\circ\text{C}$ . Range -4 to 158°F, -20 to 70°C.  
**TP425 \$249** Temperature and Humidity Logger. Digital Display. Accuracy  $\pm 0.8^\circ\text{F}$ ,  $\pm 0.45^\circ\text{C}$ . Range -4 to 158°F, -20 to 70°C.
- 4 **SK550 \$699** Temperature. Pack of twelve. Accuracy  $\pm 1.8^\circ\text{F}$ ,  $\pm 1^\circ\text{C}$ . Range -4 to 158°F, -20 to 70°C.  
**TK550 \$999** Temperature & Humidity. Pack of twelve. Accuracy  $\pm 1.8^\circ\text{F}$ ,  $\pm 1^\circ\text{C}$ . Ranges -4 to +158°F, -20 to +70°C.

Software required and sold separately. For software and other accessories, visit Page 15, call **630.543.3747** or go to [www.DicksonData.com](http://www.DicksonData.com).

## Connect With Us

# Dickson Social Media Accounts



@DicksonData



Channel:  
DicksonData



Search  
"Dickson"



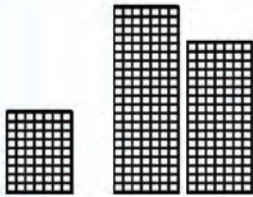
Search  
"Dickson Data Loggers"

# DicksonOne



## Temperature and Humidity Monitoring. Re-imagined.

**DicksonOne** is a wireless temperature and humidity monitoring system that automatically collects your data and delivers it to wherever you are. No more changing charts, no more downloading data.



**MULTI-LOCATION** How many points will you be monitoring? 1, 5, 100, 1000? From small cheese factories to multi-location healthcare distributors, DicksonOne is up for the task. Monitoring an additional location is as simple as buying another logger.



**ALARMS** When temperatures get too hot or cold, your power goes out, or your probe is unplugged, DicksonOne can call, text, or email you to alert you of the mishap. Throw away less products, and ensure the safety of your environment, even when you're not there.



**INFINITE STORAGE** We don't run out of space, and you never have to worry about hard drives or file folders. We've got you covered.

## WHY DID WE MAKE IT?

**DicksonOne** is the direct result of customer feedback like this:

1. We want to monitor **multiple locations** with one system.
2. We're spending too many **personnel** hours changing charts and pens.
3. We want an **easier way** to share our data.
4. We need **more robust** alarming capabilities.
5. I need to view **my data** from anywhere.

## DICKSONONE HARDWARE

**DicksonOne** Data Loggers are robust and reliable. With battery backup, your choice of Ethernet or Wi-Fi communication, and a digital display, these loggers provide the security and convenience your application needs.



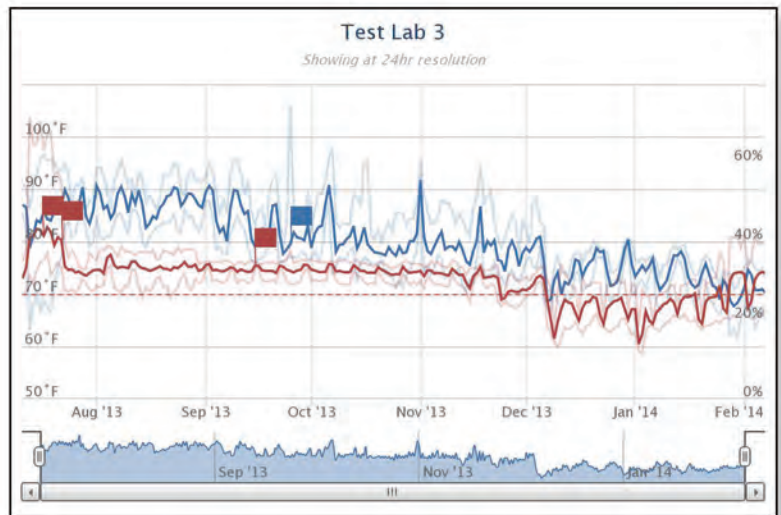
## DICKSONONE SOFTWARE

**DicksonOne** is a SaaS (Software as a Service) platform that automatically stores your data and makes it accessible anywhere.

The software is the real key to DicksonOne. We believe it rises above the competition in usability, security, and scalability. The interface is easy to navigate for everybody, from your IT team to the end-user working with the product you're trying to keep safe. DicksonOne is 21CFR11 compliant, and all data is backed up redundantly, perfect for showing an audit trail. We've had a jump on all other environmental monitoring systems for over a year, and we've kept it that way. We continually improve the system and add new features based on customer feedback. Seriously, someone is working to make it better right now.

The list of features in DicksonOne is endless. Instead of listing them all, we invite you to see for yourself.

Start your free trial at [www.DicksonOne.com](http://www.DicksonOne.com)





# DicksonOne

## Hardware Pricing

MODEL	REMOTE PROBE	PRICE
WFH20/ENH20	Digital Temperature and Humidity Replaceable Sensor	\$499
WFT20/ENT20	Digital Temperature Sensor	\$499
WFT21/ENT21	Thermistor Temperature Sensor with Glycol Bottle	\$479
WFT23/ENT23	K-Thermocouple Temperature Sensor	\$479
WFT25/ENT25	Platinum RTD Temperature Sensor	\$599



# DicksonOne

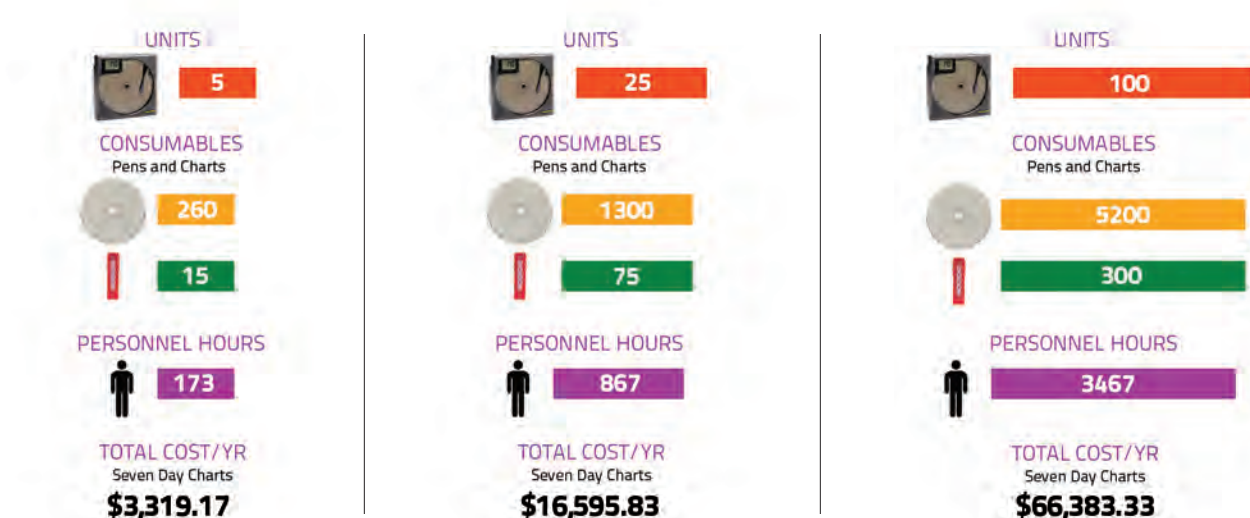
## Software Pricing

DEVICES	FEATURES	PRICE
1 to 5	Unlimited Data, Multiple Sample Rates, API Access, Email, Phone, and Text Alarms	\$119/year
6 to 20	Unlimited Data, Multiple Sample Rates, API Access, Email, Phone, and Text Alarms	\$359/year
21 to 50	Unlimited Data, Multiple Sample Rates, API Access, Email, Phone, and Text Alarms	\$1199/year
51 +	Unlimited Data, Multiple Sample Rates, API Access, Email, Phone, and Text Alarms	Call for Quote

\* Dickson offers a Basic Plan, with 30 Day Data Deletion, and 1 hour sample rates for unlimited loggers at no cost.

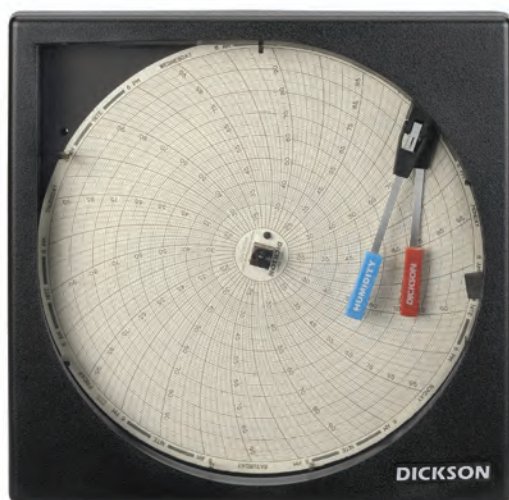


## Consider The Cost Of That Old Chart Recorder...



# Temperature and Temperature/Humidity Chart Recorders

Want a physical readout right where you are monitoring? Our Chart Recorders have you covered. For ninety years we've built the best chart recorders in the business. Check out our models below.



## 8 and 6 Inch Models

Eight and Six Inch Chart Recorders display detailed temperature and humidity values.

### MODELS AND FEATURES

<b>KT6</b>	6 Inch Temperature	<b>Starting at \$369</b>
<b>KT8</b>	8 Inch Temperature	<b>Starting at \$419</b>
<b>TH6</b>	6 Inch Temperature and Humidity	<b>Starting at \$489</b>
<b>TH8P</b>	6 Inch Temperature and Humidity	<b>Starting at \$489</b>



## 4 and 3 Inch Models

Four and Three Inch Temperature Chart Recorders designed to fit any application.

### MODELS AND FEATURES

<b>SL4350</b>	4 Inch	<b>\$239</b>
<b>SL4100</b>	4 Inch	<b>\$239</b>
<b>SC3 Series</b>	3 Inch	<b>\$239</b>

Charts sold separately. For charts and accessories, visit Page 15, call **630.543.3747** or go to [www.DicksonData.com](http://www.DicksonData.com).

PRESSURE DATA LOGGERS



**Pressure Data Logger** One second sampling rate. User replaceable battery. Optional delayed start. USB connectivity. Pressure sensor includes built-in diaphragm seal.

PR125	\$499	0-100 PSI
PR325	\$499	0-300 PSI
PR525	\$599	0-500 PSI



**Rugged Utility Pressure Data Logger** Water resistant case. 3 year battery. Unobtrusive design. Fits easily in a toolbox. USB Connection.

PR150	\$499	0-100 PSI
PR350	\$499	0-300 PSI

PRESSURE CHART RECORDERS



4 and 8 Inch Models

Four and Eight Inch Chart Recorders to meet your needs. Single AA battery powered. Rugged low-maintenance design features. 7-day or 24-hour recording times. 1/4 inch NPT Connector.

MODELS AND FEATURES

0-100 PSI	PW860/1 \$629	PW470 \$449
0-200 PSI	PW864/5 \$629	PW474 \$449
0-300 PSI	PW866/7 \$629	PW476 \$449
0-500 PSI		PW479 \$629
0-1000 PSI	PW875 \$749	

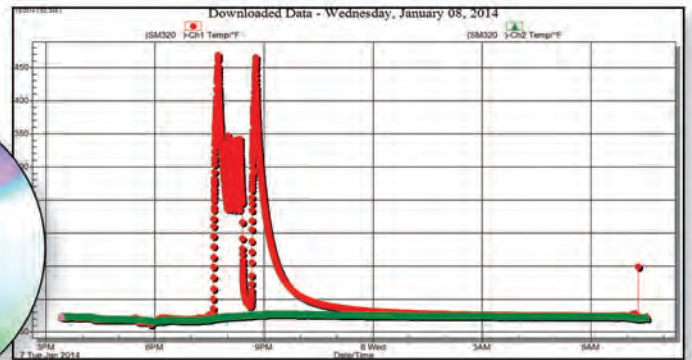
Charts sold separately. For charts and accessories, visit Page 15, call 630.543.3747 or go to [www.DicksonData.com](http://www.DicksonData.com).



# DicksonWare

**DicksonWare Software** was designed with you in mind.  
Easy installation. Painless logger setup and data downloads.  
Data visualization through populated graphs  
and tables.

Learn more at [www.DicksonData.com](http://www.DicksonData.com)



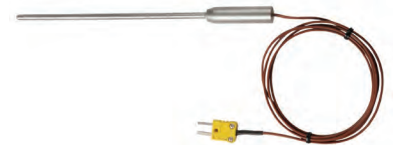
## PROBE ACCESSORIES



**D617 \$52** 10' K-TC Straight Extension Cable



**D605 \$79** 4" Piercing Probe

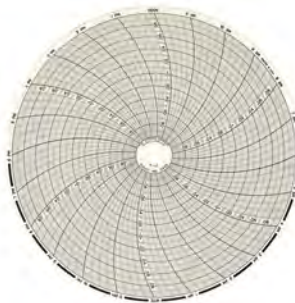


**A203 \$125** 6" High Temperature Immersion Probe

## CHARTS AND PENS

**We make reordering charts and pens a cinch.**

Only authentic Dickson charts and pens guarantee the accuracy of your temperature, humidity, and pressure data. Fortunately we've made the process of reordering charts and pens fast and easy. Simply go to [www.DicksonData.com](http://www.DicksonData.com), click 'Charts and Pens' at the top, choose your device, and easily reorder to the exact specifications you desire. Or give us a call.



Go to [DicksonData.com](http://DicksonData.com)  
Or call **630-543-3747**

## Chart Recorders: Which One Is Right For You?

Most chart recorder customers have been using their devices for a long time. When they run out of charts, they buy new ones. When their pens run dry, they buy new ones. If you are one of these people, you probably feel like you know what you are looking for . . .

### But do you?

We think it may be time to reevaluate your options. Although chart recorders are a bit of a dying technology (we will get to data loggers at the end) we feel that you should take a step back, and learn about the new features on chart recorders before placing that new order for a pack of charts and 6 red pens. Here are a few things to consider:

**Variable:** Is your chart recorder measuring temperature, when it could be measuring temperature and humidity? Is your chart recorder better served using features specific to temperature models, because humidity is of no real use to you?

**Probe:** What kind of probe are you using? Is it the correct kind? Regulations are getting stricter, and if you are monitoring your temperature because your auditing agency said you have to, you may need to monitor your temperature with a more accurate probe. Chart recorders usually come with K-thermocouple probes for temperature monitoring, which

can mean degrees of uncertainty in your measurements. Consider a device with an internal sensor, or at the minimum, be sure to calibrate your device with a 3-point and NIST calibration, ensuring the probes accuracy.

**Alarms:** Will your business hit a serious road bump if the temperatures you are monitoring get too high or too low? Will you lose product, time, and money? Do you have to be notified because regulations said so? If for some reason you want to know when your temperature or humidity is getting too high or low, you need a chart recorder with audio and visual alarms.

After considering these few features of chart recorders, is it maybe time to reconsider the device that you are using? There are many other questions that you should ask - and then answer - when choosing a new chart recorder. The process can seem daunting, but we promise it is worth it in the end. Plus, we are here to help. Feel free to call us anytime.

**Data Loggers:** Sorry, but we had to. Check them out! Everything that our new chart recorders can do, our data loggers can do better. We mean it. Questions about the switch from chart recorders to data loggers? Yup, give us a call.



## Data Logger Options:

# Museum and Archival Storage



In the last edition of Dickson Insights, we presented some questions that all of you museum professionals should consider before generating your environmental monitoring plan. You should know what your budget is, what you are monitoring, what kind of system you want or currently have, the amount of documentation you need, and what kind of analysis you'd like to perform.

So you've answered those questions to the best of your ability . . . it's now time to choose how you will monitor your environment.

### Data Logger(s)

If your budget is small, you will have to weigh features against number of loggers. This can mean choosing to monitor at a single point with a better data logger, or sacrificing certain features to buy more inexpensive data loggers.

If your budget is a bit more flexible, and your facility large, an environmental monitoring system may be in order. Environmental monitoring systems come in all shapes and sizes (check out DicksonOne on Page 10!), so do some research before you decide to purchase a system. Ask the manufacturer about the set-up process, software costs, and how the system will mesh with your facility's capabilities.

### Hardware

Choosing a specific data logger can be an arduous process. Data loggers come in all shapes and sizes, so we've listed the following features you should ask each manufacturer about before buying. When posing the following questions, you should do your best to relate each feature to how you will use it in your facility.

- Size & Shape
- Alarms
- Sampling Rate
- Display
- Memory
- Battery or AC Power

### Software

You'll need to get all that data off of your device. There are three distinct types of software used in conjunction with data loggers, according to how the data is downloaded. The first is locally hosted software, downloaded onto a single PC. This type of software is used with data loggers that require a manual download of their data. In other words, each data logger must be brought back to your PC, connected, and the data downloaded. You can also choose to host a wireless data logging system locally. This software works in conjunction with wireless data loggers, which send the recorded temperature and humidity data wirelessly to a server in your facility. The final type of software is cloud application software. Using the cloud, a company hosts your data for you, and your data is visible by logging onto a website. We've also noted a few features you should consider on the software side of things. They are:

- Alarms (Emails, Text, and Phone Call)
- Reports
- API Access
- Data Analysis

We've republished all of this information (and more!) at [blog.DicksonData.com](http://blog.DicksonData.com).



## Pharma Storage Spotlight

# The Warehouse Audit Survival Guide

Last month we wrote to all the foodies on how to survive a warehouse audit. We called it our "Food Warehouse Audit Survival Guide." This month, we'd like to take on another industry that owns and operates warehouses: pharmaceuticals. In keeping with our oh so original title, we present the "Pharmaceutical Warehouse Audit Survival Guide."

### Rule #1: Be smart about automation.

"There aren't any manual processes anymore," we've heard from our customers. "Everything is done by machines." Our advice to those of you who are thinking of automating a new processes within your warehouse, be smart about it. Be sure to test, validate, and document all automated processes. Oh, and backup plans and systems may not be a bad idea either.

### Rule #2: Know the different kinds of inspections.

There are three types of FDA inspections:

- Pre-approval inspection of a facility after a company submits an application to the FDA to market a new product

- Routine inspection of a regulated facility
- "For-cause" inspection to investigate a specific problem that has come to FDA's attention

You will most likely deal with routine inspections of a regulated facility, and hopefully will never have to deal with a "for-cause" inspection. Understand the details of each inspection type, and then prepare for that inspection.

### Rule #3: Abide by a more stringent warehouse temperature range.

Most pharmaceutical warehouses will find themselves being forced to keep the temperature of their facility between 55-85F. That is a very broad temperature range. Find a happy middle, and stick to it. Don't set your monitoring alarms for 55F and 85F. That's when it is too late!

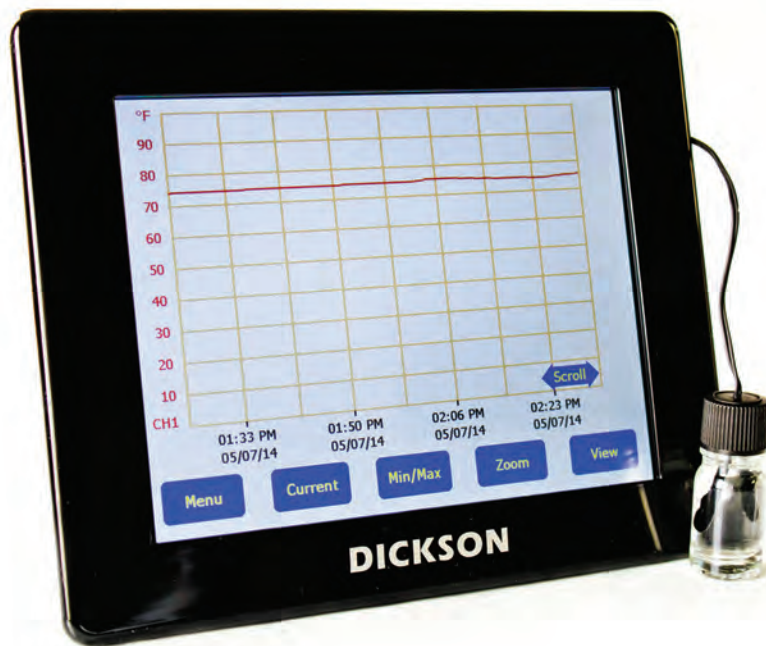
### Rule #4: Send everyone chocolates.

We are kidding. While you should never bribe your auditors, you should know their names, their function, and how they are going to interact in your facility. For some of you larger warehouses, you may have an FDA inspector who is on site for much of the year, along with a QA manager and a team of internal auditors who are continuously monitoring all of your products and processes. Create an open communication pipeline with these people. Not through chocolates, but with a shared interest in making the storage of your pharmaceuticals as safe as possible.



# TOUCHSCREENS

Vaccine monitoring at your fingertips.



## CDC Recommendations

- Touchscreen display with min/max readings
- Removable Probe submersed in Glycol/glass beads
- Calibrated in an A2LA Certified Lab
- Audible/Visual Alarms and Relays
- Temperature Accuracy:  $\pm 0.9^\circ\text{F}$  ( $\pm 0.5^\circ\text{C}$ )

## VFC Requirements

Dickson's Touchscreen Loggers are perfect for clinics and hospitals within the VFC program. With an easy-to-use interface, super accurate temperature sensor, and alarms, the Touchscreen Loggers meet or exceed all VFC Requirements, and are the future of vaccine monitoring.

## Features

- 4.9" x 6.4" touchscreen interface
- Audible/Visual Alarms
- USB and FLASH card download
- Replaceable Sensor enabled



Replaceable Sensors make recalibration a cinch



Real-time monitoring with multiple displays



Slim, sleek, and easy to mount on your refrigerator door

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## DicksonOne Reporting Suite

The **DicksonOne Reporting Suite** allows DicksonOne users the ability to create customized reports, sent directly to one or more email addresses, outlining their temperature and humidity data. What kind of temperature and humidity data? The beauty of our new Reporting Suite is that it's completely customizable.

For more information, go to **DicksonOne.com**.

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