



## Pocket PC / Desktop Enterprise Database System for Infrared Inspections

### Information..., where you need it, in the palm of your hand ...on the plant floor!

Thermal Trend Lean is an easy and effective Enterprise Database system for the Pocket PC and Desktop computers, allows you superior data management and analysis of your facility's Infrared PdM Inspection Program. You literally take your database right out onto the plant floor, which allows you access to all of the information needed to easily locate equipment that is to be inspected, review equipment's past problem history, and quickly document any conditions that you find.

When using a Pocket PC in the field for reviewing and entering your report information into Thermal Trend Lean, you can record your findings directly into the database at the time of the inspection. This eliminates the costly time spent in the office typing up the report since everything is already in the database. All you have to do is just select the report that you want and hit the print button.

The Thermal Trend Lean database system reduces the amount of redundant data entry associated with flat file reports, and eliminates errors due to misspelling and mistakes associated with entering the name of a piece of equipment in two different ways.

**Identical database applications:** The desktop & Pocket PC, share the same database. The only difference between the two versions is that the desktop version has report generation and data export capabilities.



**Desktop / Pocket PC**  
Databases automatically synchronize with each other.



**Scan Bar Codes** to quickly identify equipment and update test status



**Easily enter data** directly into the database of the problems that you find, or dictate voice comments for later data entry on your desktop computer!



### Pocket PC



**An Enterprise Database** that runs on your own desktop computer. Create as many Sites as you need for different facilities, or specific routes through your facilities. *No additional software is required!*

**A Replicated Database** that runs on your Pocket PC that is used in the field, during inspections. You simply create your database with your facility's information on your desktop computer then synchronize the selected site to the Pocket PC.

**Bar Code** your equipment and locations for fast look-up of your equipment's past test status and reconciliation of past problem conditions. It ensures that the problems were fixed correctly.

**Routes are indicated with Smart Icons:** You can easily organize your equipment by locations based on the best way for you to go through your inspection in a efficient manner. Quickly reconcile any open or closed problems as well as review test status on equipment.

**Create, Track & Trend several item types :** Thermal, Corona, Visual, Roof, Ultrasound, Transformer/LTC, Regulator, Batteries, Pole Trends, Inspection Notes, Repairs are easily tracked as well as Baseline Trending of equipment.

**Work directly with a variety of Infrared Image formats** (\*.img, \*.jpg, \*.iri, \*.is2, \*.sit) from several camera manufactures. Analyze your images from within your database also works with standard Graphic files BMP, TIF, GIF, and JPG.

**Voice Recording** Dictate directly into your database. Problem conditions and comments can easily be recorded in the field using your Pocket PC. Back in the office, your notes can be played back on your desktop computer from within the database if you don't want to enter the information in the field.

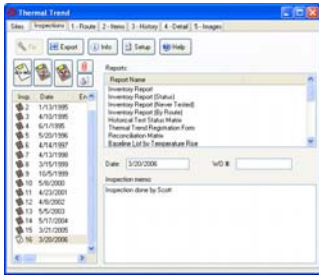
**Comprehensive Reports:** Just select the type of report you wish to print. Thermal or Visual problems details with work orders and prioritized lists, as well as Baseline Trending reports with status lists are included. Cost Benefit Analysis Reports or other types can be easily customized or exported.

**Create your own custom reports or Export out to:** MS Excel, Word, CMMS programs like MAXIMO, the possibilities are endless!



Thermal Trend Lean's intuitive **Tab Views** allows you to easily "drill down" to the information you need!

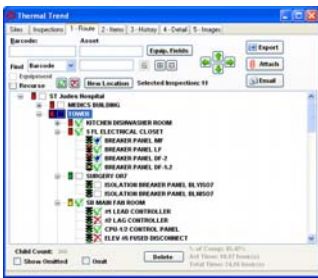
## Inspection / Reports Tab: Create Inspections and Reports



You can create as many sites as you require. A site can be for different facilities or for different routes throughout your facility. You create inspection records for each site that details when the inspection was performed and general notes regarding the inspection.

To print a report all you have to do is select the specific inspection that you wish to print out a report for and select the type of report from the report list by just double clicking on the name. It's that simple. To view the data in the database just use the intuitive drill down tabs.

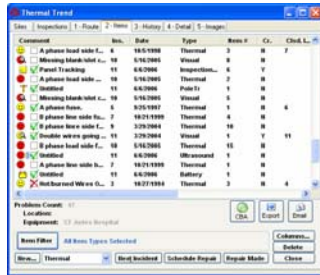
## Route Tab with "Smart Icons"™ for easy review of equipment history



Easily navigate through your equipment inspection list by using a "hierarchical route view" of where your equipment is located. You can organize your routes in any way you like, with the flexibility to work any way you choose.

- Red = Open Problem
- Yellow = Closed Problem
- Green = No Problem
- To be Tested, Tested, Not Tested
- Check off the Test status of equipment and locations

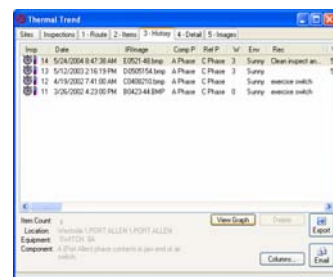
## Items Tab: for fast reconciliation of past problem statuses



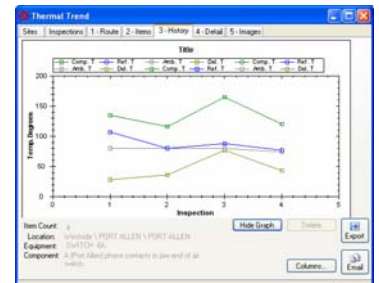
Items that are found during the inspection are associated with the appropriate equipment that was selected from the Route tab. Thermal, Corona and Visual problems that are found during the inspection are easily documented and reviewed, even baseline trending on motors, pumps, bearings. This allows you to automatically filter your item list by the entire site, a location, or a specific piece of equipment. Problem status reconciliation allows you to track past problems and check if they have been repaired correctly or if they have come back!

- Open Thermal Problem
- Closed Thermal Problem
- Open Corona Problems
- Open Roof Problems
- Open Visual Problems
- Baseline Trending
- Track Repairs

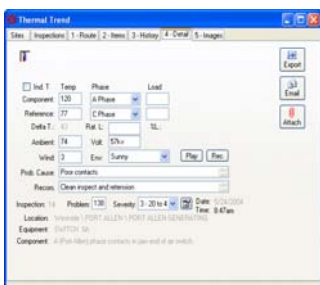
## History Tab: View Time Over Temperature Trending and Changes in Severity



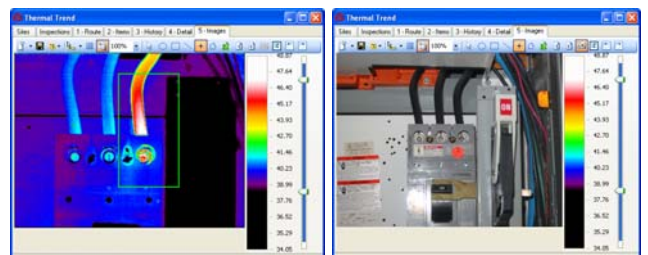
"Time over temperature trending" of problem statuses is tracked over multiple inspections automatically as well as scheduling of repairs and corrective actions. One problem That has been documented in an earlier inspection can have multiple occurrences in the following inspections, Tracking the condition over time and viewing the changes are easy with time over temperature graphs.



## Details Tab: Review Specific Details for the different Items and the Repairs!



- Details of any type of item can easily be viewed including IR images and Photos.
- Voice memos and ultrasonic recordings can be played back.
- Infrared Images can be Analyzed directly in the database.





After the inspection, just place your Pocket PC in its cradle and it will automatically synchronize with your database on your desktop computer. Transfer the image from your IR and digital camera in the usual manner and simply select and print your reports. There is no need to go back to the office and type up the report since everything is in the database. When you want to print a report, the data is automatically queried and reports are generated immediately.

### Detailed Documentation Reports for Thermal, Corona & Visual Problems, as well as Baseline Trending



**Detail Documentation Reports of all of the problems** that were found during the inspection including:

- Thermograms and photographs.
- Time over temperature trend of chronic problem conditions.
- Problem and Inspection Numbers.
- Location / Equipment.
- Complete problem description of the conditions found.
- Probable causes.
- Recommendations for the repair.

### Prioritized List Reports of Thermal, Corona & Visual Problems, as well as Baseline Trending



**Know which problems are the most critical** based on their temperature rise or Priority

The Prioritized List Reports shows you:

- Temperature Rise
- Locations / Equipment.
- Bar Code numbers.
- Complete problem descriptions of the conditions found.

### Inventory Reports of which equipment was tested/not tested and any problems found

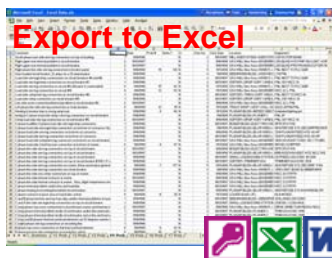


**Know what equipment in your facility was tested** when. Also allows you to track what equipment has been skipped or missed.

The Inventory Report shows you all of the:

- Test statuses
- Locations
- Equipment
- Bar code numbers for equipment and locations

### Create Custom Reports using MS Access or Export the data to Excel, Word or MAXIMO!



**Easily create comprehensive custom reports:** Cost Benefits Analysis Reports or other types can be easily customized using MS Access or just export the data to Excel for maximum flexibility.