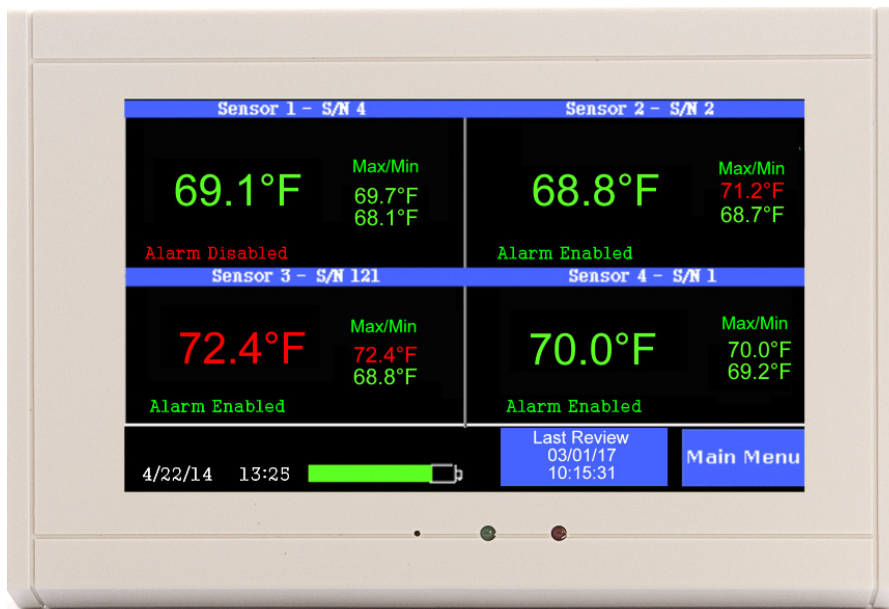




# TV2 data sheet

## TV2 Monitor for Warehouses

- Easy touch display
- Monitors four different areas
- 72 Hour internal battery backup
- Monitor temperature only or temperature & humidity
- Stores & displays over a year of temperature history
- Automatic copy all data to a PC
- Wired Ethernet socket for LAN connection
- Phone call or Text-email alert
- Simple installation



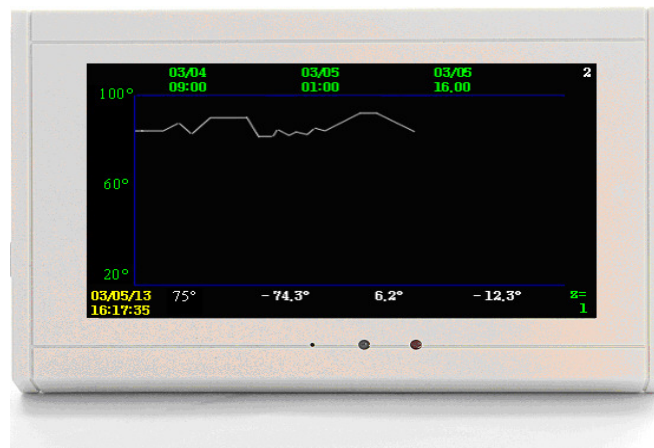
### Installs in minutes

Position each sensor and set the high and low alarm points for each to be instantly notified by Phone or Text if an alarm occurs.

The ThermaViewer complies with 21 CFR 11, FDA, CDC, and JCAHO standards.

The display shown to the left is the status screen showing the current temperature of two refrigerators and two freezers. The maximum and minimum temperature for each is also displayed.

**Just touch** any of the temperatures on the display and a chart (see below) will appear showing what happened last night, last week, last month or even last year. All temperatures are logged in non-volatile memory so a chart or list of them can be seen or printed out at any time. If you plug the TV2 into a computer with the USB cable or into your LAN with the wired Ethernet connector you can maintain a 2nd back up on your PC or server.





## TV2 data sheet

### Features:

2di has been protecting food products, and high value inventory for over 12 years. Our customers are storing inventory in refrigerator warehouses, refrigerators, freezers, and super cold freezers. They include, beer distributors, allergy clinics, doctors, hospitals, manufactures, research facilities, testing labs, schools, etc...

A list of some of our customers can be seen on our website: <https://www.e2di.com/customers.html>.

### Accuracy and calibration information

The TV2 monitor itself has no instrument error and never needs calibration. Sensor accuracy and calibration requirements are listed in the table below.

Sensor	Accuracy	Calibration
DD1 - Wired digital temperature sensor (-20°C to 80°C)	±0.3°C	Every other year
TSTM or WS4HETM - Wired or wireless Thermistor (-20°C to 80°C)	±0.3°C	Every other year
TSTC-T or WS4HETC Wired or wireless thermocouple (-200°C to 700°C)	±1.0°C	Every year

### Data logging

The TV2 logs temperature data in its non-volatile memory, storing over 1.5 years of temperature history for each. This data is always current in the TV2 monitor with newer data rolling over the oldest data so that the last 1.5 years is always stored. The temperature log for each sensor can be viewed on the TV2 by touching a temperature. The chart can be expanded so that each individual temperature can be seen, and compressed so that all 80,000 logged temperatures can be viewed on one chart. This makes it possible to see trend data in addition to each individual logged temperature.

### Backup and data safety

The TV2 has a rechargeable lithium ion battery, capable of running the TV2 **for over 72 hours** if wall power is interrupted. While the TV2 is operating on battery power all functions continue including, logging, high-low alarms, responding to auto download requests from computers and all menu functions.

### Interfacing to computers

The TV2 is a completely stand-alone data logger and viewer but it can be interfaced with computers for additional usefulness'. It comes with [free secure PC software](#) so that temperature data can be downloaded to or queried from a computer. The TV2 can be wired to a computer via its USB port or through the wired Ethernet port. If the TV2 is communicating with a computer or LAN it can generate text or email alerts any time an alarm occurs. It can also continually backup the data to the hard drive of the PC. And, of course, it can print charts reflecting the logged data or exported it to Excel.



## TV2 data sheet

### Data security

- All data logged to the TV2 is stored in non-volatile RAM memory
- Stored data can not be changed or edited - only viewed
- Data downloaded to a PC is encrypted and can only be viewed with TView software
- TView software is 21CFR11 compliant
- Data imported to a computer is stored in 256 bit encrypted files

### Alarms:

- Individual high - low temperature for each sensor
- Power Failure alarm
- Low battery alarm
- Missing sensor alarm
- Lost communication with a computer
- Audio Visual alarm
- N/O Dry contact relay closes if alarm occurs
- All alarms are logged to PC if connected

### Downloading data:

The TV2 will hold and chart approximately 1.5 years of temperature history for each sensor. All logged data can be copied to a PC via a USB cable, or the TV2 can be attached to your local area network via the optional wired Ethernet socket.

The TView software, which comes with the TV2 can automatically download the temperature history from the TV2, so that the resultant chart can be printed out or archived.

The TView software can also send a text or email alert if one of the sensors sees a temperature that is too hot or cold.

Current and historical temperatures can also be viewed on a computer with the free TView software. All temperatures can be automatically copied to a file on a computer through a USB port or over a local area network so that everyone can have access to them at any time.

