



Temperature and Humidity Virtual Chart Recorder

iTHX Series Starts at **\$395**



- ✓ Web Server
- ✓ Alarms by Email or Text Message
- ✓ No Special Software Required
- ✓ Records Years of Data on Popular SD Cards

iServer

View Temperature + Humidity with a Web Browser

The OMEGA® iTHX-SD transmitter let's you monitor and record Temperature, Relative Humidity and Dew Point over an Ethernet network or the Internet with no special software except a Web Browser.

The iTHX-SD serves Active Web Pages to display real time readings, display charts of temperature, humidity, and dew point or log data in standard data formats for use in a spreadsheet or data acquisition program such as Excel or Visual Basic.

The virtual chart viewed on the web page is a JAVA™ Applet that records a chart over the LAN or Internet in real time. With the iTHX-SD, there is no need to invest time and money learning a proprietary software program to log or chart the data.

SD Flash Memory Card

The iTHX-SD comes complete with a removable 2 GB SD Flash Memory card that can store up to seven years of readings taken at ten second intervals.

Records on SD Flash Cards

The data is recorded on widely available SD (Secure Digital) flash cards. The format is a simple ".txt" text file that is easily imported to spread sheets and other programs. It can be read on a PC or MAC with a USB card reader. You can also download the data remotely over an Ethernet network or the Internet.



iTHX-SD, shown smaller than actual size with SD card (included), \$395.

Alarm Relays

The iTHX-SD features two 1.5 Amp relays. With the easy Web-based setup page, the two relays can be programmed for any combination of temperature or humidity, and high or low set points. The relays can also be programmed to remain latched and require a manual reset if a limit is exceeded.

Battery Backup

The iTHX-SD comes with a universal 100 to 240 Vac power adapter. A standard 9 Volt Alkaline battery (also included) allows the device to log data for up to 2 days without external ac power. A failure on the Ethernet network will not interrupt data recording.

Adjustable Charts

Chart scales are fully adjustable on the fly. For example, the chart can display one minute, one hour, one day, one week, one month or one year. Temperature and humidity can be charted across the full span (-40 to 124°C, and 0 to 100% RH) or within any narrow range such as (20 to 30°C).

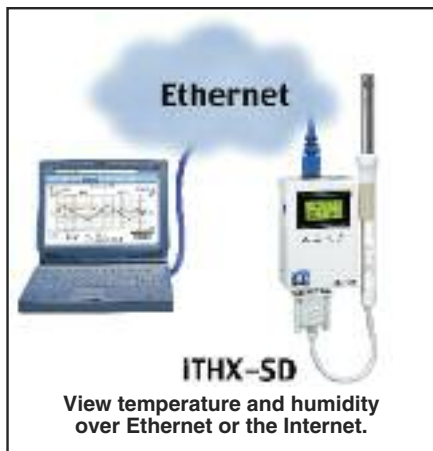
Award-Winning Technology

The iTHX-SD is simple to install and use, and features OMEGA's award-winning iServer technology that requires no special software except a Web Browser.

The iTHX-SD connects to an Ethernet Network with a standard RJ45 connector and sends data in standard TCP/IP packets. It is easily

configured with a simple menu using a Web Browser and can be password protected.

From within an Ethernet LAN or over the Internet, the user simply types its IP address or an easy to remember name such as "Cleanroom5" or "ServerRoom" in any Web Browser, and the iTHX-SD serves a Web Page with the current readings.



requires no special training, tools, or software. The device connects to any Ethernet network with standard cable and plugs and is powered by any AC outlet supplying 110 to 240 Vac.

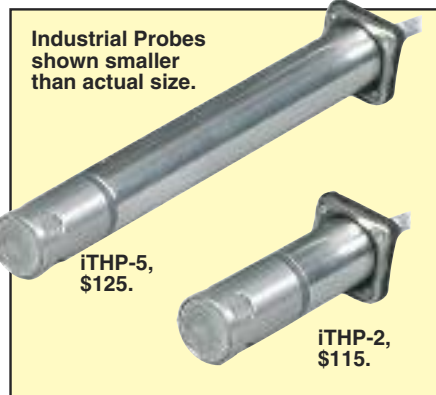
Typical Applications

The iTHX-SD is great for monitoring temperature + humidity in applications such as: clean rooms, computer rooms, HVAC systems, pharmaceutical and food processing and storage, hospitals, laboratories, semiconductor fabs, electronic assembly, warehousing, museums, manufacturing, greenhouses, farm animal shelters, and many more.

OMEGA iServer products are designed and manufactured in the USA.

Email Alarms

All OMEGA iTHX-SD models that are on a LAN that is connected to the Internet can trigger an alarm that can be sent by email to a user or a distribution list anywhere in the world, including text messages to cell phones and PDA's.



Readings through embedded Web server

Sensor Specifications

RELATIVE HUMIDITY (RH)

Accuracy/Range:
 10 to 90%: ±2%
 5 to 10% and 90 to 95%: ±3%
 0 to 5% and 95 to 100%: ±4%

Non-linearity: ±3%
Hysteresis: ±1%RH
Response Time: 8 seconds, tau 63%
Repeatability: ±0.1%
Resolution: 0.1%, 12 bit

TEMPERATURE (T)

Accuracy/Range*
Wand Probe:
 ±0.5°C (±1°F) for 5 to 45°C (41 to 113°F);
 ±0.5 to ±1°C (±1 to ±2°F) for 0 to 5°C and 45 to 60°C (32 to 41°F and 113 to 140°F)
Industrial Probe: (see chart in manual)
 ±0.5°C (±1°F) for 5 to 45°C (41 to 113°F);
 ±0.5 to ±1.5°C (±1 to ±2.7°F) for -40 to 5°C and 45 to 124°C (-40 to 41°F and 113 to 255°F)

***Note:** extended temperature range is for Ind. probe only, the iServer's operating temperature is 0 to 60°C
Response Time: 5 to 30 seconds, tau 63%
Repeatability: ±0.1°C
Resolution: 0.1°C, 14 bit

Probe Specifications

Wand Probe:
 198 L x 19 mm Dia (7.8 L x 0.75" Dia)
Cable with DB9 Connector:
 152 mm L (6" L)
Cable Operating Temperature:
 0 to 80°C (32 to 176°F)
Industrial Probe iTHP-5, iTHP-2:
 137 L or 51 L x 16 mm Dia
 (5 L or 2 L x 0.63" Dia)
Housing Material: 316 SS
Cable with DB9 Connector:
 3 or 0.9 m L (10 or 3')
Cable Operating Temperature:
 -40 to 125°C (-40 to 257°F)

iServer Specifications INTERFACES

Ethernet: (RJ45)
 Fixed or auto-negotiating
 10/100BASE-T, Auto MDI/MDIX

Supported Protocols:
 TCP, UDP, SNMP, SMTP, NTP, ARP, ICMP, DHCP, DNS, HTTP and Telnet

Sensor: Digital 4-wire, DB9
LCD Display: 16 digits, 6 mm (0.23")
SD Flash Memory Card:
 2GB card: 8 months of data storage at 1 second recording intervals or 7 years at 10 second intervals

Relay Outputs:
 Two relays 1.5 A @ 30 Vdc

Embedded Web Server:
 Serves Web pages containing real-time data and live updated charts within definable time intervals

Software: OPC Server; macro for datalogging in Excel program; compatible with Windows operating systems

Power
Input: 9 to 12 Vdc
Safety qualified AC power adapter:
Nominal Output: 9 Vdc @ 0.5 A
Input: 100 to 240 Vac, 50/60Hz (included)

Back-up Battery:
 9 Vdc, alkaline (included)

ENVIRONMENTAL

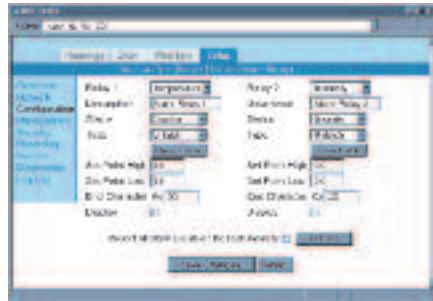
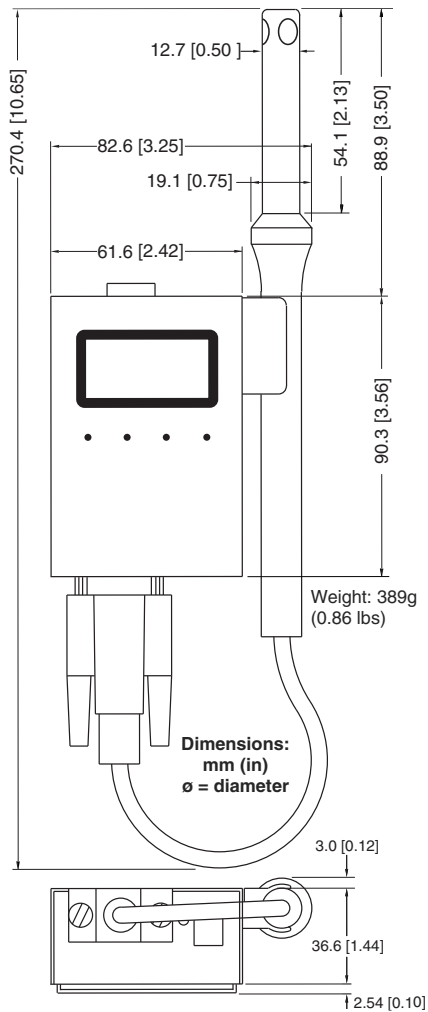
Operating Temperature:
iServer unit: 0 to 60°C (32 to 140°F)
Battery: -18 to 55°C (0 to 131°F)
ac Adapter: 0 to 40°C (32 to 104°F)
Storage Temperature: -40 to 85°C (-40 to 185°F)

Packaging

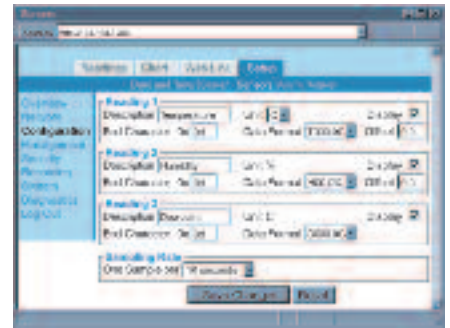
Material: Steel metal case with wall mount bracket

NIST-Traceable Calibration Certificate available.
 In compliance with ISO9001:2008, ISO10012-1.1992(E), ANSI/NCSL Z540-1.1994 and MIL-STD-45662A.

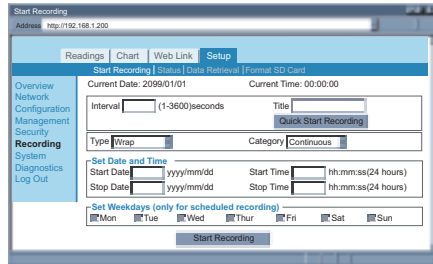




Alarm relay configuration through embedded Web server



Sensor configuration



Recording Setup

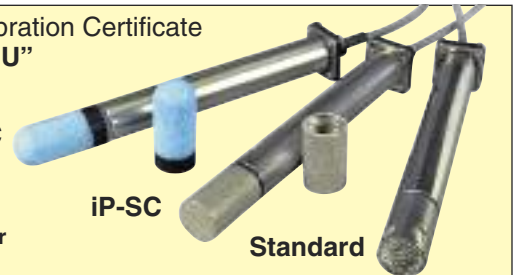


Data logging spreadsheet

Replacement Probes with Calibration Certificate available, just add: **"-CAL-3-HU"**

Optional Probe Caps shown

iP-PC



iP-SC

Standard

No need to take your unit out of service for routine calibration. Order a calibrated probe instead.

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)

Model No.	Description	Price
iTHX-SD	iServer MicroServer™ for temperature + humidity and dew point, LCD display, 2GB SD flash memory card, 2 relay alarm, battery back-up	\$395
*	Standard 203 mm (8") wand probe, cable 152 mm (6") with DB9 connector. No entry required	N/C
-2	Industrial 51 mm (2") probe, cable 0.9 m (3') with DB9 connector. Substitution for wand probe	15
-5	Industrial 137 mm (5") probe, cable 3 m (10') with DB9 connector. Substitution for wand probe	25
Accessories		
iTHP-W-6	Replacement 203 mm (8") wand probe, cable 152 mm (6")	\$100
iTHP-2-DB9	Replacement industrial 51 mm (2") probe, cable 0.9 m (3')†	115
iTHP-5-DB9	Replacement industrial 137 mm (5") probe, cable 3 m (10')†	125
DB9-CA-3	Extension cable, 0.9 m (3') with DB9 connectors	15
iP-PC	Polyethylene probe cap, for wet environments	N/C
iP-SC	Porous stainless steel probe cap, 5 um porosity, for dusty, pressurized (<35 psi) environments	25
CAL-3-HU	NIST traceable calibration certificate. 3 points of 25%, 50%, 75% RH, temperature 25°C (77°F), for new units	150
CT485B-CAL-KIT	Calibration kit, 33% and 75% RH standards	75
* -CAL-3-HU	Calibrated replacement probe and NIST traceable calibration certificate (for * insert probe type)	50

† Other lengths of cable (up to 40') are available, please contact our Sales Department. **Note:** Volume discounts are available.

Ordering Examples: iTHX-SD with LCD display, SD card, 2 relay alarm, battery back-up and wand probe, \$395.

iTHP-W-6-CAL-3-HU, calibrated replacement probe with certificate, \$100 + 50 = \$150.



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• pH and Conductivity

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• Data Acquisition

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• Heaters

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