

Temperature and Humidity Virtual Chart Recorder

iTHX-W Series



- Web Server
- Email Alarms
- Data Logging
- No Special Software Required

View Temperature and Humidity with a Web Browser

The OMEGA® iTHX-W transmitter lets 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 serves active Web pages to display real-time readings, charts of temperature and humidity, 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, there is no need to invest time and money learning a proprietary software program to log or chart the data.

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.

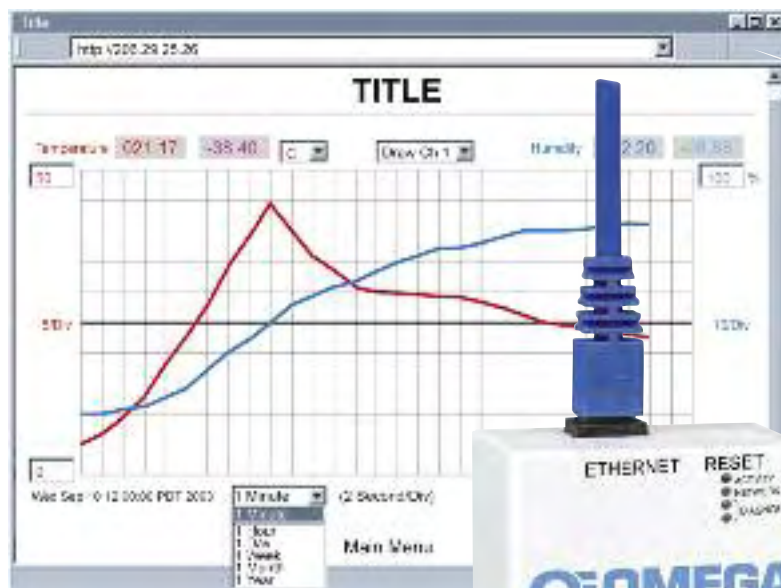
Temperature and humidity can be charted across the full span [-40 to 124°C (-40 to 254°F)], and 0 to 100% RH) or within any narrow range such as 20 to 30°C (68 to 86°F). When a second sensor is added, users can select a chart that records channel 1, channel 2 or the difference of the two channels.

Display and Chart Two Channels

The iTHX transmitters come complete with a temperature and humidity probe for measurement of a single location. With the addition of a second probe, the iTHX transmitter can measure and display temperature, humidity, and dew point in a second location up to 10' away.

The transmitter can display and chart absolute measurements in both locations, or a differential measurement between the two locations. The second probe requires no change to the basic iTHX transmitter hardware.

A second probe can be added at the time of purchase or in the future. OMEGA offers a choice of industrial probes in 2 and 5" lengths, and a wand style for ambient indoor applications. A simple DB9 "Y" connector is available for adding a second probe.



iTHX-W iServer
MicroServer™,

 iServer

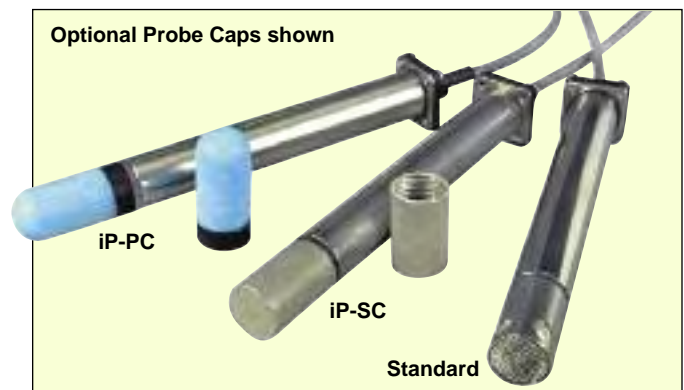
Award-Winning Technology

The OMEGA iTHX 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 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.



Optional Probe Caps shown



From within an Ethernet LAN or over the Internet, the user simply types the IP address or an easy-to-remember name such as "Server Room" or "Cleanroom5" in any Web browser, and the iTHX serves a Web page with the current readings.

Email Alarms

All OMEGA iTHX 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.

Typical Applications

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

OMEGA iServer products are designed and manufactured in the USA.

Sensor Specifications

RELATIVE HUMIDITY (RH)

Accuracy/Range:

10 to 90%: $\pm 2\%$

5 to 10% and 90 to 95%: $\pm 3\%$

0 to 5% and 95 to 100%: $\pm 4\%$

Non-Linearity: $\pm 3\%$

Hysteresis: $\pm 1\%$ RH

Response Time: 8 seconds, tau 63%

Repeatability: $\pm 0.1\%$

Resolution: 0.1%, 12 bit

TEMPERATURE (T)

Accuracy/Range**:

Wand Probe: $\pm 0.5^\circ\text{C}$ ($\pm 1^\circ\text{F}$) for 5 to 45°C (41 to 113°F); ± 0.5 to $\pm 1^\circ\text{C}$ (± 1 to $\pm 2^\circ\text{F}$) for 0 to 5°C and 45 to 70°C (32 to 41°F and 113 to 158°F)

Industrial Probe: (see chart in manual) $\pm 0.5^\circ\text{C}$ ($\pm 1^\circ\text{F}$) for 5 to 45°C (41 to 113°F); ± 0.5 to $\pm 1.5^\circ\text{C}$ (± 1 to $\pm 2.7^\circ\text{F}$) 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 industrial probe only, the iServer's operating temperature is 0 to 70°C (32 to 158°F)

Response Time: 5 to 30 seconds, tau 63%

Repeatability: $\pm 0.1^\circ\text{C}$

Resolution: 0.1°C , 14 bit

Probe Specifications

iTHP-W: 198 x 19 mm Dia (7.8 x 0.75")

Cable: 152 mm L (6") with DB9 conn.

Cable Operating Temperature:

0 to 80°C (32 to 176°F)

iTHP-5, iTHP-2:

137 or 51 L x 16 mm Dia (5 or 2 x 0.63")

Housing Material: 316 SS

Cable: 3 or 0.9 m L (10 or 3')

Cable Operating Temperature:

-40 to 125°C (-40 to 257°F)

iServer Specifications

INTERFACES

Ethernet: 10 BASE-T (RJ45)

Sensor: Digital 4-wire (DB9 connector)

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

Management: Device configuration and monitoring through embedded Web server

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

Embedded Web Server:

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

Power

Input: 9 to 12 Vdc

ENVIRONMENTAL

Operating Temperature:

0 to 70°C (32 to 158°F)

ac Adapter: 0 to 40°C (32 to 104°F)

Safety Qualified AC Power Adaptor (Included):

Nominal Output: 9 Vdc @ 0.5A

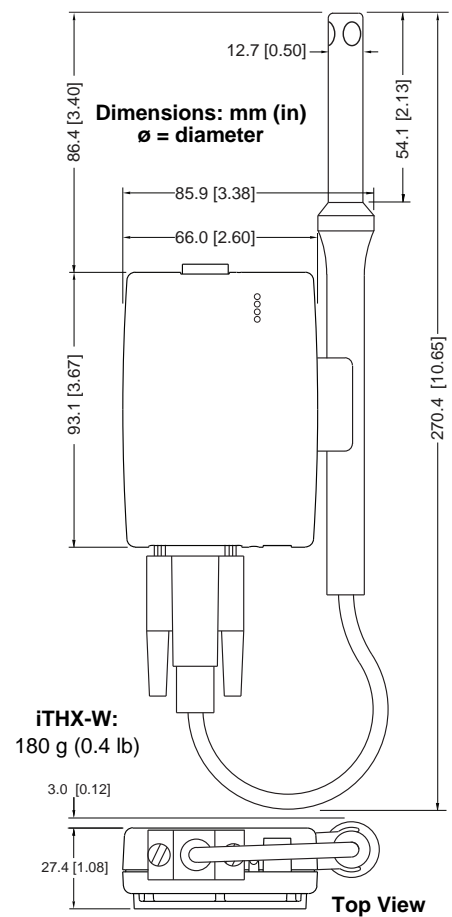
Input: 100 to 240 Vac, 50/60Hz

Storage Temp: -40 to 125°C (-40 to 257°F)

Packaging

Material: Valox 364 PBT case with wall mount bracket

Mechanical Specifications



iTHX-W:
180 g (0.4 lb)

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)

Model No.	Description	Price
iTHX-W	iServer MicroServer™ for temperature and humidity and dew point	£198
*	Standard 203 mm (8") wand probe, 152 mm (6") cable, with DB9 connector. No entry required	N/C
-2	Industrial probe 51 mm (2"), 0.9 m (3') cable, with DB9 connector [substitution for wand probe]	N/C
-5	Industrial probe 137 mm (5"), 3 m (10') cable, with DB9 connector [substitution for wand probe]	N/C
Accessories		
iTHP-W-6	Replacement wand probe, 203 mm (8"), 152 mm (6") cable	£67
iTHP-2-W	Industrial probe 51 mm (2"), 0.9 m (3') cable with DB9	78
iTHP-5-W	Industrial probe 137 mm (5"), 3 m (10') cable with DB9	84
DB9-Y	DB9 "Y" connector adapter for 2 probes	17
DB9-CA-3	Extension cable, 0.9 m (3') with DB9 connectors	11
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	17
CAL-3-HU	NIST-traceable calibration certificate. 3 points of 25%, 50%, 75% RH, temperature 25°C (77°F), for new units	84
CAL-3-HU-DUAL	Same as CAL-3-HU, for new units with 2 probes	118
CT485B-CAL-KIT	Calibration kit, 33% and 75% RH standards	51
* -CAL-3-HU	Calibrated replacement probe and calibration certificate	34

* Volume discounts available.

Ordering Examples: iTHX-W, iServer MicroServer™ with temp and humidity and dew point, 203 mm (8") wand probe.

iTHP-W-6-CAL-3-HU, calibrated replacement probe with certificate

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