

Environmental Surveillance over the Internet

Flash Archive
http://192.168.1.200

Flash Archive
Low AlarmT(below)=044.5 F High AlarmT (above)=090.0 F

Temperature 72.3 F Archives_Done Humidity 016.2

122 100%

9.0 F/Div

09:42:10

16.2 %RH Record
72.3 °F ON

°C/°F TIME BKLT

TEMPERATURE / HUMIDITY

NEWPORT®

DIAGNOSTICS
NETWORK LINK
ACTIVITY

\$495



- ✓ Email Alarms
- ✓ Virtual Chart Recorder
- ✓ Web Server
- ✓ Accurate Readings
- ✓ Data Logging
- ✓ No Special Software Required

Web-based Remote Surveillance of Temperature + Humidity and Security

The **NEWPORT® iSE** environmental monitor provides Web-based remote surveillance of environmental conditions in critical HVAC applications such as computer server rooms, clean rooms, laboratories, museums, warehouses, or any remote facility.

View and record Temperature, Relative Humidity and Dew Point over an Ethernet network or the Internet with no special software—just a Web browser.

EMAIL ALARMS

The device can trigger an alarm if temperature or humidity goes above or below a set point that you determine. Your alarm can be sent by email to a single user or to a group distribution list, including text messages to Internet enabled cell phones and PDA's.

PHYSICAL THREATS

The **NEWPORT iSE** includes screw terminals for two contact closures that work with common alarm sensors. You can instruct the iSE monitor to send an alarm if a door is opened, a window is broken, or a fire sprinkler goes off.

POWER FAILURE

The iSE monitor can trigger an alarm if the AC power fails. The iSE monitor will continue to collect data for ten days powered by a standard 9 Volt alkaline battery (included). The data is stored in nonvolatile flash memory and can later be downloaded over the Ethernet.



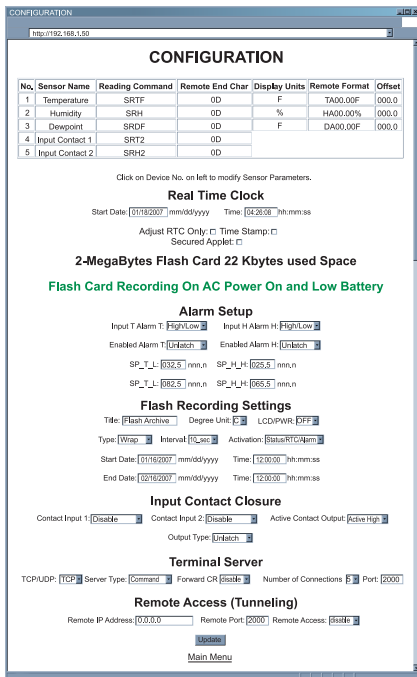
NEWPORT instruments
are designed and
manufactured in the U.S.A.

Also available: the **iSE-TC** environmental monitor with two independent thermocouple channels provides Web-based remote surveillance of temperature conditions in any remote facility.

LOCAL ALARMS

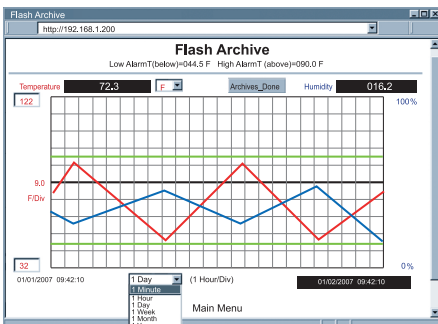
The NEWPORT iSE monitor includes two 1.5 Amp output relays that are controlled by the alarm conditions you select. The relays can trigger flashing lights and a siren for example to alert personnel near the scene.

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, as well as alarm conditions triggered by contact closures. The relays can also be programmed to turn off when conditions return to normal, or programmed to remain latched and require a manual reset.



VIEW CHARTS AND GRAPHS ON THE WEB

The NEWPORT iSE serves Active Web Pages to display real time readings, display 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 NEWPORT iSE, there is no need to invest time and money learning a proprietary software program to log or chart the data.

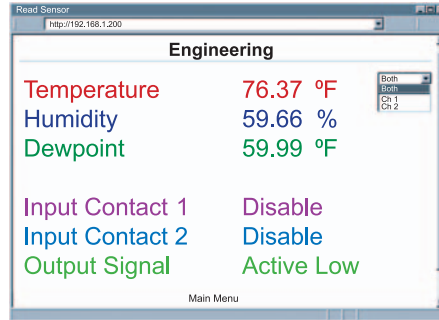
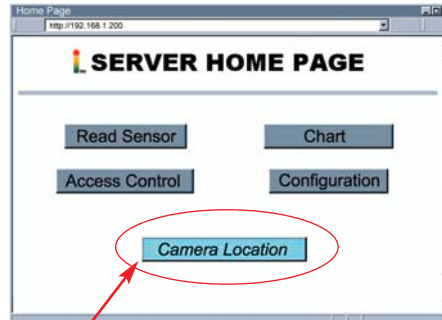


Chart scales are fully adjustable on the fly. For example, the chart can display one minute, one hour, one day, one week, one month or one year. Temperature and humidity can be charted across the full span (-40 to 124°C, and 0 to 100% RH) or within any narrow range such as (20 to 30°C).



LINK TO WEB CAM OR IP CAMERA

The Web page includes a link to a "Web Cam" or "IP camera" (not included). If you get a message about an alarm condition, you can quickly click on the link to view the actual scene over the Internet.



FLASH MEMORY

The NEWPORT iSE records data on a removable 2-MByte Flash Memory card (included) that can store one full year of readings taken at one-minute intervals (or two months of readings

taken at ten second intervals). Up to four years of temperature + humidity readings can be stored on the optional 8 MByte card. Even if the Ethernet network fails, data will continuously record on the built-in nonvolatile flash memory.

The iSE monitors come complete with a plug-in temperature and humidity probe that mounts on the instrument or separately with the six foot extension cable (included).

The temperature/ humidity sensors are interchangeable and do not require routine calibration. And if a replacement sensor is ever needed, the instrument does not require calibration.

Installation and operation of the NEWPORT iSE monitor 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 110-230 VAC.

AWARD-WINNING TECHNOLOGY

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

The iSE 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 "Cleanroom 5" or "Midwest Server Room" in any Web Browser, and the iSE serves a Web Page with the current readings.

TYPICAL APPLICATIONS

The NEWPORT iSE 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.

NEWPORT iServer products are designed and manufactured in Santa Ana, California.

Specifications iSE-TH

Relative Humidity Sensor

Accuracy/Range: ±2% for 10 to 90%
±3% for 0 to 10% and 90 to 100%

Non-linearity: ±3%

Hysteresis: ±1%RH

Response Time: 4 seconds
(63% slowly moving air)

Repeatability: ±0.1%

Resolution: 0.03%, 12 bit

Temperature Sensor

Accuracy/Range*:

Standard Probe: ±0.5°C (±1°F)
for 0° to 70°C (32° to 158°F)

Industrial Probe: ±0.5°C (±1°F)
for 0 to 80°C (32 to 176°F).

±1°C (±2°F) for -40 to 0°C and 80 to 124°C (-40 to 32°F and 176 to 254°F)

*Note: extended temperature range is for industrial probe only, the iServer's operating temperature is 0-60°C.

Response Time: 5 seconds
(63% slowly moving air)

Repeatability: ±0.1°C

Resolution: 0.01°C, 14bit

Probe

Housing material: SS 316

Standard Probe Dimensions:

Ø13 x 83.8mm lg (Ø 0.5" x 3.3"lg)

Industrial Probe Dimensions:

Ø16 x 137mm lg (Ø 0.63" x 5"lg);
Cable: 6.1m (20') long, operating temp:
0 to 105°C (32 to 221°F)

Optional Caps for Industrial Probes

iP-PC

Polyethylene Cap
Option



iP-SC

Porous Stainless
Steel Cap Option

Common Specifications

Interfaces Ethernet: 10Base-T (RJ45)

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

Indicators (LED's) Network Activity, Network Link, Transmit and Receive/Diagnostics

LCD Display 32 Digits 4.8 x 9.7mm (0.19 x 0.38")

Relay Outputs Two Relays 1.5A @ 30Vdc

Alarm I/Os Two Contact Inputs, One Open Collector Output 150mA @ 30Vdc

Memory 512 Kbytes Flash, 16 Kbytes SRAM

Memory Data Flash Card 2 M bytes: 2 months of data storage at 10 second logging intervals or 1 year at 1 minute intervals

Management Device configuration and monitoring through embedded WEB server.

Software Firmware upgradeable. Including an Excel program for automatic data logging within definable time intervals, compatible with all Windows operating systems.

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

Power Input: 9-12 Vdc

Safety Qualified ac power adapter:

Input: 100-240Vac, 50/60Hz

Nominal Output: 9 Vdc @ 0.5A, incld

Consumption: 2.5 W max.

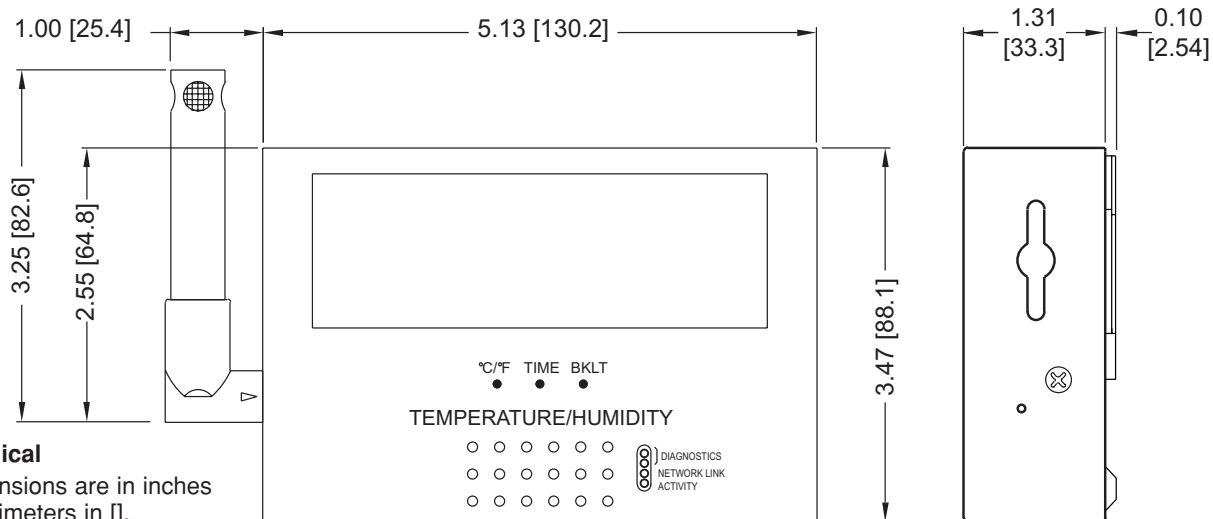
Battery: 9Vdc, Alkaline, included

Environmental

Operating Temperature:

0 to 60°C (32 to 140°F)

Material: SS 304 case w/ wall mount bracket.



Model No.	Description	Price
iSE-TH	iSE monitor for temperature + humidity. The iSE-TH includes a LCD display, 2 Mbytes flash memory card, 2 relay alarms, battery back-up, and universal (100-240 Vac) power adapter.	\$495
*	Standard attached probe and 6ft (1.8m) extension cable (no entry required)	N/C
-5	Substitute Industrial 5" (127mm) Probe, 20ft (6m) cable with mini DIN connector for standard probe.	25
Accessories		
CAL-3-HU	NIST traceable calibration certificate. Three humidity points: 25%, 50%, 75%. Temp 25°C. (for new iSE-TH)	125
CT485B-CAL-KIT	Calibration kit, 33% and 75% RH standards (for iSE-TH)	75
IP-PC	Polyethylene probe cap, for wet environments (for Industrial Probe only)	N/C
IP-SC	Porous stainless steel probe cap, 5um porosity, for dusty and pressurized (<35 psi) environments (for Industrial Probe only)	25
iSE-TH-MC2	Memory data flash card, 2 Mbyte / 1 year @ 1 minute intervals.	10
iSE-TH-MC4	Memory data flash card, 4 Mbyte / 2 years @ 1 minute intervals.	20
iSE-TH-MC8	Memory data flash card, 8 Mbyte / 4 years @ 1 minute intervals.	30
UNIV-AC-100/240	Replacement universal ac power adapter	25