



wireless Meter Scanner & Controller



The image displays the NEWPORT wiSeries Wireless Meter Scanner & Controller system. It includes a black handheld scanner with a large antenna, a computer monitor showing a software interface, and a white zED-T wireless end device. The software interface on the monitor shows a 'CHART' window with a graph titled 'wiSeries' and a URL 'http://192.168.1.200'. The graph displays temperature data for various processes (P1 to P6) over time. The scanner's display shows '2000.0' in red LEDs and '00.0' in green LEDs. A price tag indicates '\$395 wi8'. The zED-T device has a 'NEWPORT' logo and 'zED-T' text. The scanner has a 'NEWPORT' logo and 'POT 2008' text. The software interface also shows 'Min/Max Temperature 48.0/41.0 C' and '5 C/Div'.

- ✓ User-friendly, Simple to Configure
- ✓ Wireless Inputs: Thermocouple, RTD, Temperature
- ✓ Embedded Ethernet (standard)
- ✓ 2 Alarm Outputs: Solid State Relays (SSR's), dc Pulse, Mechanical Relays, Analog Voltage & Current
- ✓ Free Software

wiSeries Wireless Monitoring and Control System

The new **NEWPORT wiSeries** wireless monitoring and control system features meters and scanners compatible with a large and growing number of NEWPORT wireless sensors:

UWTC "Universal Wireless Thermocouple" Type J, K, T, E, R, S, B, N, and C.

UWRTD "Universal Wireless RTD".

zSeries wireless End Devices with sensors for Temperature.



UWTC-NB



UWTC



The **wiSeries 1/8 DIN Panel Meter & Controller** can monitor up to eight (8) wireless sensors. The compact instrument connects directly to an Ethernet network and the Internet and features NEWPORT's award-winning embedded Web Server. It is easily configured and monitored with a Web browser over the Ethernet network or the Internet.

Alternatively, the **wi8** meter-controller can instead be connected to the USB port of a single computer with a "USB Ethernet Adapter" that are inexpensive and widely available.

MONITOR AND ALARM

The **wi8** meter-controller comes standard with a choice of either two Form C relays, or two SSR's (solid state relays) that can be used for control functions or alarms. The **wi8** meter can monitor alarm conditions for any or all of the wireless sensors. For example, the **wi8** meter can be set up to trip an alarm if any one of the sensors indicated it was above or below a pre-set alarm point.

MONITOR & CONTROL LOCALLY AND OVER THE INTERNET

The new NEWPORT® **wiSeries** wireless monitoring and control system provides local monitoring and control, along with remote Web-based monitoring of temperature from thermocouples, RTD's, and semiconductor sensors.

The wireless sensors transmit up to 1000m (3280')* --without obstructions or interference, to a **wiSeries** monitor-controller connected directly to an Ethernet network and the Internet. The wireless system complies with IEEE 802.15.4 operating at 2.4 GHz.

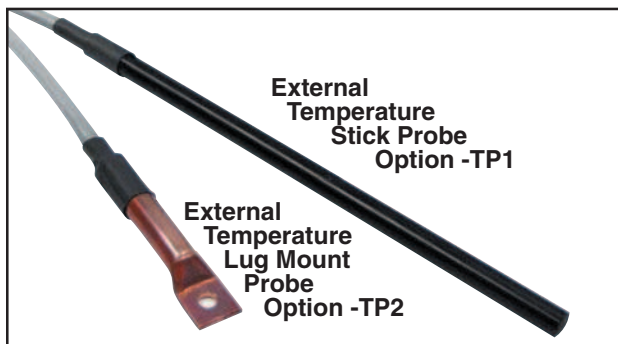
* Distances for UWTC-1, UWRTD-1: up to 60m (200 ft), UWTC-2, UWRTD-2: up to 120m (400 ft), zED-x-P: up to 1000m (3280 ft), zED-x: up to 90m (300 ft) all distances are without obstructions or interference.

The NEWPORT **wiSeries** system let's you monitor and record temperature over an Ethernet network or the Internet without any special software--just your Web Browser.

WIRELESS SENSORS

NEWPORT offers a wide and growing selection of wireless sensors for a variety of applications. Depending on application, the wireless sensors are powered by 2 AA batteries, a single lithium battery (approx. AA size), 2 D-cell batteries, or an external AC Adapter that operates on any voltage worldwide from 100 to 240 Vac.

Wireless sensors are available with external probes appropriate for an almost unlimited variety of industrial and commercial applications.



ETHERNET

The **wiSeries** meter-controller-scanner is an independent node on the network sending and receiving data in standard TCP/IP packets. It is easily configured from a Web Browser and can be password protected. From within an Ethernet LAN or over the Internet, the user simply types the IP address (such as 192.168.1.200) or an easy to remember name (such as "Oven 5" or "Chicago TestRoom") and the **wiSeries** meter serves a Web Page with the current readings.

ALARM AND EMAIL

The **wiSeries** meter can trigger an alarm if variables go 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 cell phones and PDA's. The NEWPORT "Mail Notifier" software is a free and easy program for this application.

The **wiSeries** meter-controllers operate on any AC voltage worldwide from 90 to 240 Vac and 50 to 60 Hz. The meter-controller connects directly to an Ethernet Network or the Internet.



Rear View of **wi8**

Unlike an RS232 or USB device, it does not require a host computer.

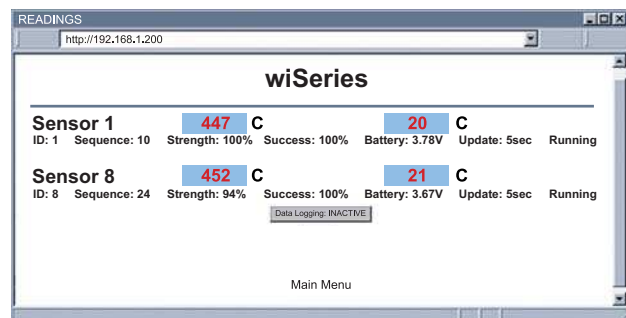
EMBEDDED WEBSERVER

The NEWPORT **wiSeries** wireless sensor system is easy to install, simple to operate, and features NEWPORT's award-winning iServer technology with an Embedded Web Server that requires no special software.

CHARTS AND GRAPHS

The NEWPORT **wiSeries** system serves Active Web Pages to display real time readings and charts of temperature. You can also log data in standard data formats for use in a spreadsheet or data acquisition program such as Excel or Visual Basic. NEWPORT offers a free and easy to use program for logging data to Excel.

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 **wiSeries** system there is no need to invest time and money learning a proprietary software program to log or chart the data.



Temperature Readings of up to 8 Sensors

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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 can be charted across the full span (-40 to 125°C) or within any narrow range such as (20 to 30°C).

NEWPORT offers an OPC Server software (\$295) that makes it easy to integrate the wiSeries wireless sensor system with many popular Data Acquisition and Automation programs offered by Omega, Wonderware, iConics, Intellution, Rockwell Automation, and National Instruments, among others.

PROGRAMMABLE COLOR DISPLAY

The NEWPORT wiSeries feature NEWPORT's patented programmable color displays. The display can be programmed to change color at any set point or alarm point.

For example, the wiSeries can be programmed to display the process value in **GREEN** during warm-up, switching to **AMBER** to signal the normal operating range, and in **RED** to signal an alarm condition. The changes in color are quickly seen from a distance, and machine operators can intuitively react to changing conditions. The colors can be programmed to change back when the value drops back below the alarm point or to "latch" on until being reset by the operator.

The wiSeries can also be programmed to display only one unchanging color: **GREEN**, **AMBER**, or **RED**. This is a useful way to let an operator identify, at a glance, process values in three separate locations, or to display three different measurements such as Temperature, Pressure, and Flow.



QUALITY and TECHNOLOGY

Designed and manufactured in the USA, the innovative NEWPORT® wiSeries of meters & controllers features an extended one (1) YEAR warranty at no extra charge.

SPECIFICATIONS

ON/OFF Control Output 1 & 2

Relay: 250 Vac or 30 Vdc @ 3A (resistive load); SPDT

SSR: 20 to 265Vac @ 0.05 - 0.5A (resistive load); continuous

DC Pulse: Non-Isolated; 10 Vdc @ 20 mA

Analog Output (output 1 only): Non-Isolated, 0 to 10Vdc or 0 to 20mA, 500Ω max.

Operation: Direct (cool), reverse (heat); deadband; single sensing input.

Configuration: Output 1 and 2 can be configured as Alarm 1 and 2, respectively. Analog Output for Output 1 can be configured as retransmission.

Alarm 1 & 2 (programmable)

Type: SPDT Relay, SSR, and DC Pulse

Operation: High/low, above/below, band, latch/unlatch, normally open/normally closed and process/deviation; front panel configurations; single/multiple sensing input(s).

Analog Retransmission Output (programmable)

Type: Non-Isolated, Retransmission 0 to 10Vdc or 0 to 20mA, 500Ω max (Output 1 only).

Operation: Single sensing input; accuracy is ± 1% of FS when following conditions are satisfied. 1) Input is not scaled below 1% of Input FS. 2) Analog Out is not scaled below 3% of Output FS.

Network and Communications

Ethernet: Standards Compliance IEEE 802.3 10Base-T

Supported Protocols: TCP/IP, ARP, HTTPGET

Connection: Screw terminals

General

Display: 4-digit, 9-segment LED, 10.2 mm (0.40") and 21 mm (0.83"), red, green and amber programmable colors

Protection: Front bezel: NEMA1/Type1

Dimensions: 48 H x 96 W x 127 mm D (1.89 x 3.78 x 5")

Panel Cutout: 45 H x 92 mm W (1.772" x 3.622"), 1/8 DIN

Operating Temp: 0 to 55°C (32 to 131°F), 90% RH non-condensing

Line Voltage/Power: 90 - 240 Vac ±10%, 50 - 400 Hz*, 110 - 375 Vdc, equivalent voltage * No CE compliance above 60 Hz

Low Voltage/Power Option: 24 Vac**, 20 to 36 Vdc.

External power source must meet Safety Agency Approvals

** Units can be powered safely with 24Vac power, but no certification for CE are claimed

A complete wireless system requires at least 1 Receiver (**wi8xx**) and 1 End Device (**UWTC** or **zED**).

To Order (Specify Model No.)		
Model No.	Price	Description
wi833-U	\$395	Wireless Meter/Controller for UWTC units with 2 Relays: Form "C" SPDT 3 A @ 120 Vac, 3 A @ 240 Vac, Embedded Ethernet, 90-240 Vac/dc, 50-400 Hz
wi844-U	395	For UWTC units with Two Pulsed 10 Vdc @ 20 mA (for use with external SSR)
wi852-U	395	For UWTC units with Analog Output selectable as retransmission of process value; 0 to 10 Vdc or 0-20 mA @ 500 ohm max. and SSR
wi853-U	395	For UWTC units with Analog Output 0 to 10 Vdc or 0-20 mA @ 500 ohm max. and Form "C" Relay
wi822-zT	395	For zSeries units with Two Solid State Relays (SSR's): 0.5 A @ 120/240 Vac continuous
wi823-zT	395	For zSeries units with SSR and Form "C" Relay
wi824-zT	395	For zSeries units with SSR and Pulse 10Vdc @ 20 mA (for use with external SSR)
wi854-zT	395	For zSeries units with Analog Output 0 to 10 Vdc or 0-20 mA @ 500 ohm max. and Pulsed 10 Vdc @20 mA (for use with external SSR) and SSR

Other outputs options are available, please contact our Sales Department.

For Low Power Option (20 to 36 Vdc, 24 Vac) **add -DC** to end of part number: **wi833-zT-DC** \$395 + 25 = **\$420**.