DESCRIPTION

The West 8010+ is a new digital panel indicator providing a high contrast, high visibility display, designed for optimal ease of use in a wide variety of temperature and related process applications.

The 8010+ is fast, accurate and easy to read with a jumperless configuration, plug in output boards and an improved PC configurator for quick and simple setup. The new generation 8010+ further provides a new user-selectable dual color display option with fixed red or green displays or a green to red color change when an alarm condition occurs.

In addition, plug-in modules allow PV retransmission or transmitter power supply and up to 5 alarm relays (latching or non-latching).

The 8010+ indicator is affordable, full featured, easy to use and compact with performance features characteristic of the + Series product line that work for you making temperature and process display simple.

The 8010+ digital indicator like its predecessor, the 8010, remains an easy to use low cost solution for temperature and process display applications - providing excellent visibility and high accuracy all within an affordable and ultra compact housing.

APPLICATIONS:

The West 8010+ digital indicator like its predecessor, the 8010, remains an easy-to-use, low cost solution for indication and display within industrial temperature and process measurement applications — providing high visibility and excellent accuracy in a compact size.

INDUSTRIES

- Industrial and lab ovens/furnaces
- Plastics and thermal forming
- Packaging applications
- And any other display of temperature or other process measurement especially where an out-of-range alarm condition is a requirement

FEATURES/BENEFITS

- **NEW** 10V SSR driver output allows drive of up to 3 typical SSR/SCR inputs
- **NEW** Plug-in Output Modules for SSR driver, Triac, Relay and linear outputs — easily field changeable
- **NEW** Common HMI and styling with other West + Series products promoting uniform system appearance and operation
- **NEW** Latching Alarms - Included as standard.
- **NEW** Improved PC Configurator with easy to use “wizard” suits both novice and experienced users
- **NEW** Jumperless configuration with self-recognition of optionboards — promotes simple, error free set-up
- **NEW** Multi-point Scaling and Tare features included as standard.
**SPECIFICATIONS**

**STANDARD FEATURES**
- 4 per second input sample rate
- Universal input
- **NEW** Improved HMI, 3 button operation,
- 4 digit 13mm high red, green or red/green
- display (color change on alarm), indicators
- for °C/°F; set-up, alarms (5) and max. & min.
- indicators. Labels for 27 common units
- provided for mount behind clear window
- **NEW** Plug-in output modules – install just
- the function needed
- **NEW** Multipoint scaling & Tare functions
- **NEW** Jumperless input configuration
- **NEW** Auto-detection of installed output
- modules
- **NEW** Improved PC configuration software
- Process alarms (**NEW** standard latching
- alarm)
- Rugged ABS Plastic housing

**ENVIRONMENTAL CHARACTERISTICS**
- Operating Temp: 32° to 131°F (0° to 55°C)
- Storage Temp: -4° to 176°F (-20° to 80°C)
- Humidity: 20% to 95% non-condensing RH

**ELECTRICAL**
- **SUPPLY VOLTAGE:** 100-240V, 50/60Hz, Optional
- 20-48VAC 50/60Hz / 22-65VDC
- **POWER CONSUMPTION:** 5W / 7.5 VA Maximum

**INPUTS**
- T/C's: J, T, K, L, N, B, R, S, C; Pt Rh20%
- vs. Pt 40% Rh
- RTD: 3-wire, PT100
- DC Linear (Scalable –1999 to +9999)
- Volts: 0-5V, 1-5V, 0-10V, 2-10V
- DC milliamps: 0-20mA or 4-20mA
- DC millivolts: 0-50mV, 10-50mV

**OUTPUTS**
- All outputs are user-selectable and
- customized based on desired application;
- choose from the following output types
- Max # of Outputs: 5 for alarm, 24 VDC
- transmitter power supply or retransmit of
- process value
- Single Alarm Relay: Optional SPDT; 240VAC
- 2A resistive; Lifetime >500,000 operations
- at rated voltage/current

**OUTPUTS (cont’d)**
- Dual Alarm Relays: Optional, Two x SPST
- contacts with shared common. 2 Amp
- resistive at 240V AC; >200,000 operations.
- Latching or non-latching
- SSR Drive: Optional drive capability: >10 VDC
- nominal into 500 ohm minimum
- DC Linear: Optional 0-20mA, 4-20mA into 500
- ohm max; 0-10V, 1-5V, 2-10V, 0-5V into 500
- ohm min; Outputs have 2% over/under drive
- applied; Accuracy +0.25% (mA into 250 ohm
- load, V into 2x ohm load); degrading linearity
- to +0.5% for increasing burden to specified
- limits
- Triac: Optional 0.01 to 1A AC, 20 to 280Vrms,
- 47-63 Hz (Limit 2)
- Transmitter Power Supply: Optional 24 VDC
- (Limit 1)

**OUTPUT FUNCTIONS**
- **Process Alarm:** (reverse or direct)
- **Alarm Modes (Alarm 1 through 5):** High/Low,
- Band, Deviation, logical OR/AND
- **Retransmit:** Process value

**ELECTRICAL PERFORMANCE**
- **Accuracy:** ± 0.1% of input range ±1 LSD (T/C
- CJC better than 1 degree Q)
- **Input sample rate:** 4 per second, 14 bit
- resolution
- **Impedance:** >10M ohm for the thermocouple
- and mV ranges, 47k ohm for V ranges and
- 5 ohm for mA ranges
- **Sensor Break Detection:** <2 seconds (except
- zero based DC ranges), high alarms activate
- for T/C, RTD and mV ranges, low alarms
- activate for mA or V ranges

**COMMUNICATIONS INTERFACE**
- **User-selectable:** 2-wire, RS-485 serial
- communications option with choice of
- Modbus RTU or West ASCII protocol; 1200 to
- 19200 baud
- **PC Configuration:** Offline configuration from
- serial port to dedicated configuration socket
- (comms option not required)

**RATINGS/AGENCY APPROVALS**
- **Conformance:** CE, UR, cUR UL File # 67237
- **Safety:** EN61010
- **EMC:** EN61326

**PROTECTION**
- IEC IP66 (NEMA 4X) front panel
- IEC IP20 (behind the panel protection)

**PHYSICAL DIMENSIONS**
- Panel Cutout: 1.77” x 3.62” (45mm x 92mm)
- **Width:** 3.78” (96mm)
- **Height:** 1.89” (48mm)
- **Depth:** 3.93” (100mm)
- **Weight:** 0.46 lbs (0.21 kg)
- **Mounting:** Plug in panel with fixing strap

**OPTIONS/ACCESSORIES**
- Digital Input 1: Selects volt-free or TTL input
- **NEW** Faster RS-485 serial communication speeds
- and user-selectable (Modbus/RTU or West
- ASCII) option
- **NEW** 24VDC transmitter power supply option
- Choice of Led colors: red or Green
- Drive output: 10VDC-SSR

**WARRANTY**
- 3 Years

* Specifications are for base models with standard
features only unless otherwise noted. Specifications
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## MODELS

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<td>with Alarm</td>
<td>1 3 Wire RTD or DC mV</td>
<td>2 Thermocouple</td>
<td>3 DC mA</td>
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* Maximum of two Triac outputs per unit

## DIMENSIONS - 1/8 DIN

![Dimensions Diagram](image)

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West Brand 8010+ Data Sheet (4/05)