Data Sheet



1/8 DIN Indicator with Alarm

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.

8010+[™]

Affordable, High Contrast, Compact and Easy to Use

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

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



WEST[™]brand

1/8 DIN Indicator with Alarm

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
- <u>NEW</u> Plug-in output modules install just the function needed
- $\underline{\text{NEW}}$ Multipoint scaling & Tare functions
- NEW Jumperless input configuration
- <u>NEW</u> 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

DISPLAY

- Type: Red/Green, 7 segment LED, 4 digit primary display, single digit secondary display
- Height: 0.53" (13mm) primary display, 0.39" (10mm) secondary display
- Annunciators: LED indicators for output and status

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

8010+[™]

Affordable, High Contrast,

Compact and Easy to Use

- 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 2k 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: \pm 0.1% of input range \pm 1 LSD (T/C CJC better than 1 degree C)
- 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

- <u>NEW</u> Faster RS-485 serial communication speeds and user-selectable (Modbus/RTU or West ASCII) option
- <u>NEW</u> 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 subject to change without notice in accordance with our DBS policy of continuous improvement. All product and brand names are trademarks of their respective owners. All rights reserved.

West^M brand and 8010+^M are trademarks of Danaher Industrial Controls Group. All rights reserved.

© 2005 DICG Corp.

West Brand 8010+ Data Sheet (7/05)



Indicators

WEST™brand

8010+[™]

Affordable, High Contrast, Compact and Easy to Use

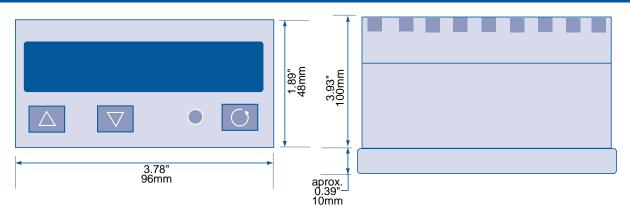
1/8 DIN Indicator with Alarm

MODELS

Code 1: Model # P8011Z	Code 2: Input Type	Code 3: Option Slot 1	Code 4: Option Slot 2	Code 5: Option Slot 3	Code 6: Option Slot A	Code 7: Power Supply	Code 8: Display Color
I/8 DIN Indicator with Alarm Function	 Wire RTD or DC mV Thermocouple DC mA DC Voltage 	 0 Not Fitted 1 Relay 2 DC for SSR 3 DC 0-10V 4 DC 0-20mA 5 DC 0-5V 6 DC 2-10V 7 DC 4-20mA 8 Triac* 	 0 Not Fitted 1 Relay 2 DC for SSR 3 DC 0-10V 4 DC 0-20mA 5 DC 0-5V 6 DC 2-10V 7 DC 4-20mA 8 Triac* 9 Dual Relay 	 0 Not Fitted 1 Relay 2 DC for SSR 3 DC 0-10V 4 DC 0-20mA 5 DC 0-5V 6 DC 2-10V 7 DC 4-20mA 8 Transmitter Power Supply 9 Dual Relay 	 0 Not fitted 1 RS-485 Serial Communication 3 Digital Input 	0 100-240 AC 2 24-48 AC or DC	 0 Red (Fixed) 1 Green (Fixed) 4 Red/Green Color Change

* Maximum of two Triac outputs per unit

DIMENSIONS - 1/8 DIN



* Specifications are for base models with standard features only unless otherwise noted. Specifications subject to change without notice in accordance with our DBS policy of continuous improvement. All product and brand names are trademarks of their respective owners. All rights reserved.

West[™] brand and 8010+[™] are trademarks of Danaher Industrial Controls Group. All rights reserved.

© 2005 DICG Corp.

West Brand 8010+ Data Sheet (7/05)

Satellite Locations:

North America: North Carolina, South Carolina, Connecticut, Massachusetts, New York, Canada, British Virgin Islands • Europe: United Kingdom, Italy, France, Germany, Spain, Slovakia • Latin America: Brazil • Asia: China, Japan, Korea, Singapore



Process Automation Worldwide Brands: LFETM • PartlowTM • PMATM • RustrakTM • WestTM

Process Automation Worldwide Brands:

LFE[™] Partlow[™] PMA[™] Rustrak[™] West[™]

More Available. With factories around the world, global sales and applications support, and an expansive network of distributors, we stay close to our customers - shortening lead times and fostering responsiveness. Three-day lead time is standard, with same-day shipments available on many of our products.

More Selection. We have a broad selection of controllers to meet application requirements in a variety of industries. User-configurable, accurate and flexible, with low, mid, or high level performance ranges, our controller products meet your system and budgetary requirements.

More Reliable. Our experience with more than 25,000 customers has taught us to design controllers that are reliable and durable, with quality standards that meet six sigma requirements.

For additional information or a full-line catalog, contact DICG Customer Service or visit our web site.

* Specifications are for base models with standard features only unless otherwise noted. Specifications subject to change without notice in accordance with our DBS policy of continuous improvement. All product and brand names are trademarks of their respective owners. All rights reserved.

West[™] brand and 8010+[™] are trademarks of Danaher Industrial Controls Group. All rights reserved.

© 2005 DICG Corp.

West Brand 8010+ Data Sheet (7/05)



Process Automation Worldwide Brands: LFETM • PartlowTM • PMATM • RustrakTM • WestTM