Controllers

Single-Loop Temperature Process Controllers

*Basic
Controllers & Indicators*

*General-Purpose Limit,
Temperature/Process & Valve Motor Drive
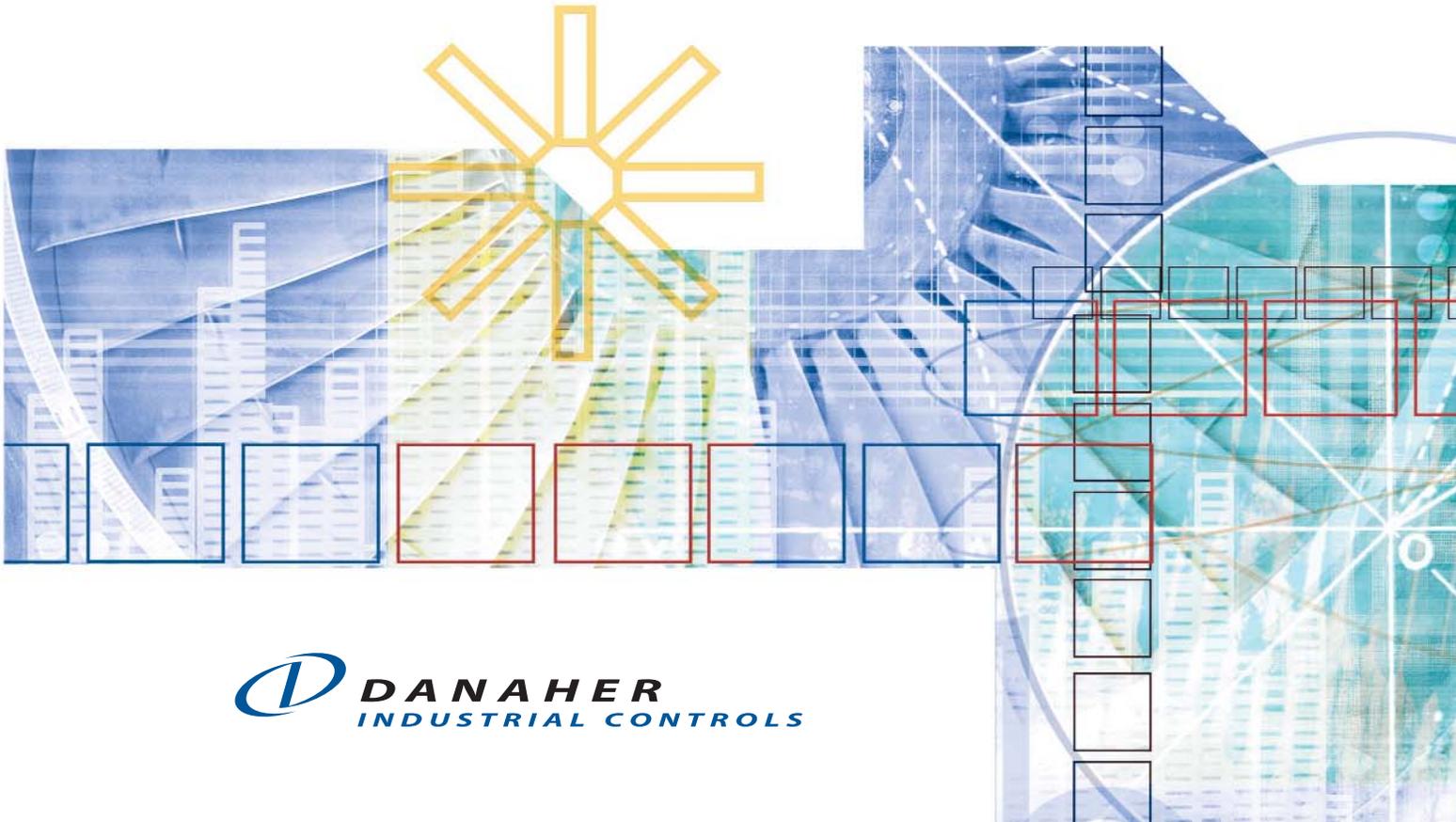Controllers*

**Controllers you
can count on,
time after time.**

*Application/Industry-Specific
Controllers*

*Basic & High End
Profilers*

WEST™ brand

DANAHER
INDUSTRIAL CONTROLS

About West

West offers the broadest range of reputable brand name temperature and process controller products to satisfy a full range of industry applications. West is a renowned European leader in the manufacture of state-of-the art, value packed single-loop temperature controllers servicing industry and machine builders in their process automation applications for over 50 years. West has been a division of Danaher Industrial Controls Group (DICG) since 1994.

West brand controllers fall into four feature/ functionality categories: *(1) Basic, (2) General-Purpose, (3) Application/Industry-Specific* and *(4) High-End.* All come equipped with easy-to-read LED displays and all are easily programmed via front to panel keypads or serial communication.

Applications/Industries:

Ovens, Furnaces, Boilers

Plastics Molding and Forming

Packaging

Semiconductor

Food Processing

Environmental Chambers

Driers, Heat Treating

Glass Tempering

A Full Line

Our new "Plus" + Series™ generation controllers with remote setpoint capability have raised the bar for performance and simplicity. The + Series platform continues to expand – incorporating numerous improvements in features, communications, display interfaces and software improvements. They surpass competitors in ease-of-use, delivery and value-per-dollar investment.

Danaher Industrial Controls West brand controllers come in a variety of types:

- Front to Panel, Single-Loop Indicators & Controllers
- Basic Digital Indicators and Controllers
- General-Purpose Limit, Temperature/Process and Valve Motor Drive Controllers
- Application/Industry-Specific Controllers
- High-End Profilers

WEST™ brand

Temperature & Process Control

Types: *Basic, General-Purpose, Application/Industry-Specific, High-End*

Guide: With one of the broadest lines in the industry, DICG West brand controllers range from simple ON/OFF limit device controls to sophisticated profile controllers, including many designed for specific industry applications with distinct mounting size and functionality requirements. Our front to panel (FTP) controllers are sized for all popular panel cutouts, including 1/4, 1/8, 1/16 and 1/32 DIN.

Applications/Industries:

Ovens, Furnaces, Boilers

Plastics Molding and Forming

Packaging

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Environmental Chambers

Driers, Heat Treating

Glass Tempering

Basic Controllers & Indicators

When you need basic control, West brand controllers offer unmatched value and simple operation. Our controllers and indicators set up fast and have an intuitive, no-nonsense operator interface.

NEW

+ Series™ 6010+ and 8010+ Digital Indicators

Basic indicators at an unmatched value with simple operation. Our affordable, new generation West brand digital indicators are compact, set up fast and have an intuitive, high-contrast no-nonsense operator interface.

Type: *Front to panel (FTP), digital*

Size: *1/8 DIN (8010+) and 1/16 DIN (6010+)*

Display: *Single 4-digit LED*

Inputs: *1; universal (thermocouple, RTD, DC linear V, DC linear mA/mV); user-selectable*

Outputs: *1-5 (1-4 on 6010+); relay, SSR driver, DC linear V, DC linear mA, Triac*

Output Function: *Limit, alarm, retransmission (recorder output), transmission power supply*

Communications: *RS-485 serial (West ASCII or Modbus®)*

Agency Approvals: *UR, cUR, CE, NEMA 4x*

2300 Basic Controller/Indicator

Type: *Front to panel (FTP), digital*

Size: *1/32 DIN*

Display: *Single, large 4-digit LED*

Inputs: *1; universal (thermocouple, RTD, DC linear mA/mV)*

Outputs: *2-3; relay, SSR driver*

Output Function: *Control, alarm*

Control: *PID with easy tune or manual tune with pre-tune, ON/OFF*

Communications: *RS-485 serial (Modbus® protocol)*

Agency Approvals: *UR, cUR, CE, NEMA 4x*

6500 Simplified Basic Controller

Type: *Front to panel (FTP), digital*

Size: *1/16 DIN*

Display: *Single, large 3-digit LED*

Inputs: *1; thermocouple, RTD*

Outputs: *1-2; relay, SSR driver*

Output Function: *Control, alarm*

Control: *Easy tune, PID, ON/OFF*

Communications: *None*

Agency Approvals: *UR, cUR, CE, NEMA 4x*

Temperature & Process Control

WEST™ brand

Temperature & Process Control

Types: Limit, Temperature & Process, Plastics Forming, Valve Motor Drive

Guide: For cost-effective, accurate control of temperature and processes, trust West brand general purpose controllers. The new + Series includes numerous features that improve ease of use and value-per-dollar investment.

Applications/Industries:

Industrial and Lab Ovens/Furnaces

Plastics and Thermoforming

Packaging Applications

Form/Fill/Seal

Food Processing

Kilns/Ovens

Limit Controllers

Limit controllers are used for processes that require an extra device for safety reasons. Limit controllers are programmable safety cut-out devices with optional alarms for use in a wide variety of applications, including but not limited to furnaces and ovens. They provide latched relay outputs configurable for high/low limit setpoints. Fail-safe shutoff must be manually reset before process can continue.

NEW

+ Series™ 4700+, 6700+ and 8700+ Limit Controllers

Type: Front to panel (FTP), digital

Size: 1/4 (4700+), 1/16 (6700+) and 1/8 (8700+) DIN

Display: Dual, 4-digit LED

Inputs: 1; universal (thermocouple, RTD, DC linear V, DC linear mA/mV); user-selectable

Outputs: 1-3; relay, SSR driver, DC linear V, DC linear mA, Triac

Output Function: Limit, alarm (process, deviation/band), retransmission (recorder output), transmission power supply

Control: High/low limit

Communications: Optional West ASCII or Modbus®

Agency Approvals: UR, cUR, CE, NEMA 4x

Temperature & Process Controllers

West brand controllers provide reliable control of temperature and other industrial processes. They are suitable for a broad range of applications.

+ Series™ 6100+, 4100+ and 8100+ Controllers

The + Series platform continues to expand with the addition of the 1/4 and 1/8 DIN models. Together with the 1/16 DIN model, they incorporate numerous product specification, communication, display interface and configuration software improvements. They surpass competitive offerings in ease of use, delivery and value-per-dollar investment, including such useful features as new remote setpoint.

Type: Front to panel (FTP), digital

Size: 1/4 (4100+), 1/16 (6100+) and 1/8 (8100+) DIN

Display: Dual, 4-digit LED

Inputs: 1; universal (thermocouple, RTD, DC linear V, DC linear mA/mV); optional NEW remote setpoint

Outputs: 1-3; relay, SSR driver, DC linear V, DC linear mA, Triac

Output Function: Control, alarm (process, deviation/band), heater break sensor, retransmission (recorder output), transmission power supply

Control: ON/OFF, PID, pre-tune, self-tune, manual tune

Communications: RS-485 serial (West ASCII or Modbus®)

Agency Approvals: UR, cUR, CE, NEMA 4x

Applications/Industries:

    Food Processing

    Industrial and Lab Ovens/Furnaces

Applications/Industries:

    Plastics and Forming

General-Purpose Valve Motor Drive (VMD) Controllers

Guide: Affordable valve motor drive controllers are specifically designed to control valve motor drives used in many manufacturing applications, such as gas burner control on a production line. Our VMD tuning algorithm gives accurate control and fast output reaction without the need for slide wire feedback or excessive knowledge of three-term action (PID) tuning algorithms. Auto-tune reduces valve activity to an absolute minimum, reducing wear.

4170, 6170, and 8170 VMD Controllers

Type: *Front to panel (FTP), digital*

Size: *1/4 DIN (4170), 1/16 DIN (6170), 1/8 DIN (8170)*

Display: *Dual, 4-digit LED*

Inputs: *1; universal (thermocouple, RTD, DC linear V, DC linear mA/mV)*

Outputs: *1-3; relay, SSR driver, DC linear, Triac*

Output Function: *Control, alarm, retransmission (recorder output), transmitter power supply*

Control: *PID, pre-tune, self-tune, manual tune*

Communications: *RS-485 serial (West ASCII protocol); PC configuration*

Agency Approvals: *UR, cUR, CE, NEMA 4x*

Application/Industry-Specific Controllers for Plastics Forming

Designed specifically for control of temperature in plastic forming applications, these controllers provide early warning of heater element failure prior to production problems for improved product quality and reduced incidence of scrap. Easy programming of setpoints, soft-start, plus pre-tune and self-tuning functions. Display amps or process temperature. Sensor and current transformer input.

Series 6600, 8600 Controllers

Type: *Front to panel (FTP), digital*

Size: *1/16 DIN (6600), 1/8 DIN (8600)*

Display: *Dual, 4-digit LED*

Inputs: *Thermocouple, RTD*

Outputs: *1-4; relay, SSR driver, DC linear, Triac*

Output Function: *Control, alarm, recorder output, heater break alarm, retransmission (recorder output)*

Control: *ON/OFF, PID, pre-tune, self-tune*

Communications: *RS-485 serial (West ASCII or Modbus® protocol)*

Agency Approvals: *UR, cUR, CE, NEMA 4x*

High-End Profile Controllers

Profile (or ramp/soak) controllers offer high accuracy and come in basic and high-end models that differ in the number of segments and programmable profiles (model dependent). They allow operators to program a number of setpoints (ramp) and the time to sit at each setpoint (soak), with the ability to enter a number of segments to allow complex temperature profiles for enhanced control. Four to eight programs of 16 free-format segments (model dependent). Profile modes such as guaranteed soak, delayed start, profile recovery, and cycling provide advanced control.

4400 Profiler (High-End)

Type: *Front to panel (FTP), digital*

Size: *1/4 DIN*

Display: *Dual, 4-digit LED*

Inputs: *1; universal (thermocouple, RTD, DC linear V, DC linear mA/mV), optional 6 digital for remote profile control*

Outputs: *1-3; relay, SSR driver, DC linear, Triac, optional 4 event relays*

Output Function: *Control, alarm, event, retransmission (recorder output), transmitter power supply*

Control: *ON/OFF, PID, ramp/soak, pre-tune, self-tune, VMD*

Communications: *RS-485 serial (West ASCII protocol or Modbus® protocol)*

Agency Approvals: *UR, cUR, CE, NEMA 4x*

6400 Profiler (Basic)

Type: *Front to panel (FTP), digital*

Size: *1/16 DIN*

Display: *Dual, 4-digit LED*

Inputs: *1; universal (thermocouple, RTD, DC linear V, DC linear mA/mV)*

Outputs: *1-3; relay, SSR driver, DC linear, Triac*

Output Function: *Control, alarm, event, recorder output*

Control: *ON/OFF, PID, pre-tune, manual tune*

Communications: *RS-485 serial (Modbus® protocol)*

Agency Approvals: *UR, cUR, CE, NEMA 4x*

+ Series Key Advantages

Improved Design with Common Styling for Easy Operation and Reduced Training Requirements

Built with new technology, West + Series products offer an improved, easy-to-use front panel HMI (Human Machine Interface), auto-hardware recognition, PC configuration software, faster communication speed and backward compatible panel cutout and panel wiring capability. These functionality advancements coupled with the common styling and consistent operation and design elements found across the entire + Series product family significantly reduce operator training requirements while enhancing the operator experience via improved control and application flexibility.

Plug-In Modules for Lower Total Cost of Ownership

The + Series products are uniquely designed to be configurable via plug-in output boards. This modular approach reduces the cost of process monitoring because users buy only those output modules needed for their application. Companies keep only the + Series base model in stock, and adapt it for each application as required. Best of all, the plug-in module feature combined with the auto-detection of hardware modules, (no link) jumperless configuration and PC configuration capability mentioned earlier are estimated to reduce setup time and decrease the risk of setup mistakes by as much as 50 percent!

The recently introduced and expanding + (Plus) Series controllers and indicators from West are worth a closer look. They form our next-generation product platform and incorporate many affordable, easy-to-use and adaptable features that promote maximum temperature and process control.

West brand + Series products currently encompass our popular *Temperature and Process Controller, Limit Controller,* and *Basic Controller & Indicator* product categories with plans to convert our remaining model West controllers to the + Series in the near future.

Here are some advantages that the West + Series platform products offer:

- **NEW** Improved easy-to-use HMI
- **NEW** Jumperless input configuration
- **NEW** Auto-hardware recognition
- **NEW** Improved Windows® PC configuration software
- Faster communication speeds in selectable Modbus® or ASCII format
- Backward compatible panel cutout, housing and terminal wiring capability

Other Reputable Process Automation Brands from DICG to Consider

PMA™ brand is a respected European brand of digital and electronic process and multi-function controllers including a complete line of bus and PLC system models used for temperature, pressure, flow and level applications. For over 75 years, PMA has been active in developing leading-edge process control products and solutions for measurement and control technology under the slogan "wir kriegen's geregelt" which literally translated into English means "we get it regulated and controlled", or more loosely translated, "close the loop with PMA".

**Worldwide Process
Automation Brands:**

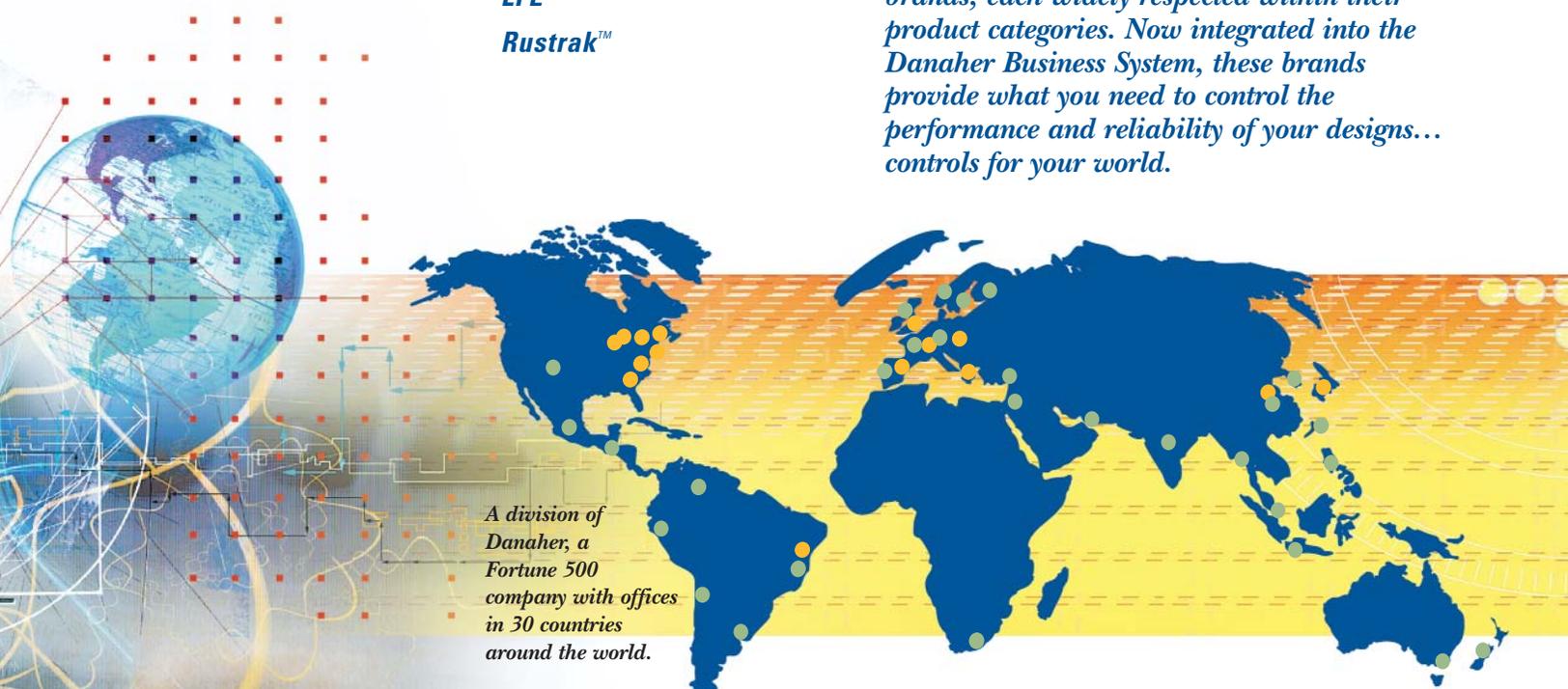**PMA**™

Partlow™

West™

LFE™

Rustrak™

*Danaher Industrial Controls Group was
formed through the merger of 28 premier
brands, each widely respected within their
product categories. Now integrated into the
Danaher Business System, these brands
provide what you need to control the
performance and reliability of your designs…
controls for your world.*

*A division of
Danaher, a
Fortune 500
company with offices
in 30 countries
around the world.*

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. A three-day lead time is standard, with same-day shipments available on many products.*

More Precise. *With 230 combined years of experience in process automation, we understand increasing
demands for product performance. Our products give you precise control of your designs.*

More Durable. *Experience with more than 25,000 customers has taught us to design for durability:
long life and feature rich functionality that others envy.*

More Customizable. *JIT manufacturing enables us to immediately produce any of thousands of product
variations. And we're happy to work with customers to customize products to exact requirements.*

For additional information or a full-line catalog, contact your DICG representative at
+1 800.390.6405 or visit our group web site at **www.DanaherIndustrialControls.com**.

⊘ **DANAHER**
INDUSTRIAL CONTROLS

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