Controllers, profilers, indicators...

...and the versatility of a range of ancillary equipment

Chart Recorders: for hard copies of all process activities

West Instruments distributes a wide range of Chart Recorders. The range provides reliable operation in rugged environments – from light industrial through to extreme industrial applications. The products are designed for high accuracy and reliability, allowing for precise measurement and monitoring of process parameters.

Thyristors: problem solvers in many guises

Thyristor units are available from 10-2600A, including single, two and three phase units. They are available in a variety of configurations, suitable for a wide range of applications. The range includes features such as surge protection and overload protection to ensure safe and reliable operation.

Sensors: models available for almost every need

With over 30 years supplying experience of sensors, West’s range offers a combination of performance and quality that is hard to beat. These high quality temperature sensors can be manufactured in many styles, from a simple welded junction joining two dissimilar metals, to mineral-insulated sensors with waterproof connecting heads and adjustable process fittings. The diverse range of designs means there is likely to be an ideal sensor for any installation or application.

Available From:
West Instruments is a division of Danaher (UK Industries) Ltd. A member of the Danaher Corporation.

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...and much more
West Instruments: the latest cost-effective technology backed by long experience

As part of the multi billion dollar Danaher Corporation, West Instruments has been developing and supplying process instrumentation for over 60 years. With experience like that, the company knows what customers need and knows how to provide it.

That was true when, back in the 1970's, it became one of the first companies to design a microprocessor-based temperature control device and it's just as true today. With Worldwide Centres of Excellence in Germany (PMA) and the UK (West), the R&D and manufacturing traditions for the development and manufacture of temperature and process controllers are continued. This has led to innovations such as the new-generation Plus Series instruments, offering faster, easier setup and operation together with improved performance and many other cost-saving features.

The West product portfolio also includes limit controllers, profilers and indicators and the company also distributes a wide range of temperature sensors, circular chart recorders, thyristors and actuators.

## Technical Data

### Models

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### Features & Functions

- PID Control
- ON/OFF Control
- Max. Number of Alarms
  - 2
  - 2
  - 2
  - 2
  - 2
- Remote Setpoint
- Retransmission Output
- Heater Break Alarm
- RS485 Communications
- Modbus/TCP Ethernet Comms
- Tuning
  - Pre-tune
  - Easy-tune
  - Self-tune
  - Manual Tuning
- Power Supply
  - 100 – 240V AC
  - 20 – 50V AC / 22 – 65V DC
  - 12 – 24V AC / 12 – 30V DC
  - 18-30V DC

### Contents

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  - Multi Loop Controllers
- Indicators
- Profilers
- Auxiliary equipment
- Chart recorders
- Thyristors
- Sensors
- HMIs
- Selection chart
The 4400 and 6400: profiling performances that are hard to beat

The 4400 can create a profile with anything from 1 to 121 segments, store up to 8 programs and configure and store extra programs on a PC.

The 6400 is a leader in its class, offering a 4 recipe, 16 free-format segment profiling capability and unrivalled ease-of-use.

4400 features:
- 'Auto Hold' facility
- Remote run hold
- Remote programme select
- 4 event outputs
- Real-time clock
- Power failure recovery

6400 features:
- Fast accurate control via raPID fuzzy logic
- Saves up to 4 programmes in memory
- Programming in rate or time mode
- Guaranteed soak to protect production quality

6 West Instruments
MLC 9000+: compact multi loop controller

An MLC9000+ system comprises 1 to 8 Control Modules. 1, 3 & 4 loop modules are available (control up to 32 loops per system), with heater break options on 1 to 3 loop modules. Communication options for connecting to a PLC, HMI, PC or LAN include Modbus, DeviceNet, PROFIBUS, Ethernet IP and ModbusTCP.

The MLC features a hot swap facility, a module can be replaced and back in service within 30 seconds due to automatic reconfiguration. Using a MLC system can reduce installation time and cost when compare to standard single loop controllers. The MLC9000+ involves less wiring with no need for panel cut-outs.

The 6500: basic 1/16 DIN controller

The 6500 is a simple, no frills 1/16 DIN controller offered at a competitive price. Added to this are excellent display characteristics represented by a highly visible three-digit display and clear go/no go indication.

Features include:
- Easy Tune (PID) or On/Off
- Setpoint lock
- On control indicator
- Alarm lock
- Optional process alarm
- Adjustable PV offset

The benefits of the 6500 are:
- straightforward operator interface
- simple set-up
- ease of use
- a fast ‘up-time’ over a defined range

8800+8840: advanced temperature & process controllers

The 8800/8840 controllers offer the best in advanced process control for demanding applications. They provide a choice of simple 2-point (on/off) control, continuous PID control or VMD valve motor drive.

Features include:
- Front Comms port & PC configuration software
- 2 or 3 Analogue inputs
- Valve motor drive with/without position feedback
- Maintenance manager and error list
- Self-tuning to the setpoint without oscillation
- High visibility display sharing plain text or bargraphs

Offering superior, cost-effective performance – whatever your needs
Whatever the process, from ceramics to industrial heating…

### 6600/8600: heater-break controllers for the plastics sector

The 6600 and 8600 controllers have been designed specifically for the control of temperature in plastic forming applications. They provide early warning of heater element failure prior to production problems, thus improving production quality and reducing the incidence of scrap.

A low, high and short-circuit heater break alarm are all available at the same time to provide essential protection. A unique VMD tuning algorithm continuously monitors the process to provide stable control at all times. The Plus Series interface and greater field flexibility.

- **Features include:**
  - Auto-Detected Hardware
  - Modbus Communications
  - Remote/Dual Setpoint Options
  - Process & Loop Alarms
  - Auto or Manual tuning
  - Jumperless Configuration
  - Valve Position Indication

### 2300: basic 1/32 DIN controller / indicator

- **Specifications:**
  - 0.1% Accuracy
  - 3-Wire PT100, T/C or mV/mA Input
  - Manual/Easy Tune
  - 2 process alarms
  - 0.1% Accuracy
  - 3-Wire PT100, T/C or mV/mA Input
  - Manual/Easy Tune

### 6170+/8170+/4170+: valve motor control

- **Features include:**
  - Pantel colour change on alarm display
  - Red, green or green to red colour change display
  - Plug-in modules allow PV retransmission of process or setpoint signals to the 8010+. This 8010+ can serve most process indication requirements.

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  - Manual/Easy Tune

### 8080 Indicators: process changes at a glance

The West 8080 offers highly accurate process monitoring and unparalleled display quality. It features a built-in LED backlighted display of temperature or process value or setpoint.

- **Specifications:**
  - RS485 Comms
  - Security lock
  - Tare function
  - Up to 5 outputs
  - Jumperless configuration
  - Self-recognition of option boards
  - Auto-Detected Hardware

### 6010+ 8010+: Indicators: a versatile and highly visible option

- **Specifications:**
  - Jumperless configuration
  - Self-recognition of option boards
  - Auto-Detected Hardware
  - RS485 Comms

...and for anything from lab ovens to extruders, West has the solution.
Whatever the process, from ceramics to industrial heating...
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• ease of use
• a fast 'up-time' over a defined range

The Plus series controllers combine sophisticated functionality with built-in versatility and ease of use to provide a range of controllers to suit most process requirements.

Because their inputs and outputs are all plug-in, including relay, SSR, triac, linear and digital, they can be easily customised as required.

Other features include:
• Jumperless configuration – one less area for potential error
• Auto-hardware detect/set-up – to reduce set-up times
• NEW options of remote set point (RSP) and transmitter power supply (TxPSU)
• Configuration via PC / Customisable operator menu
• Improved, easy to use HMI – making set-up process quick and easy

The 8800/8840 controllers offer the best in advanced process control for demanding applications. They provide a choice of simple 2-point control, continuous PID control or on/off mode control.

Features include:
• Front Comms port & PC configuration software
• 2 or 3 Analogue inputs
• Valve motor drive with/without position feedback
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The ProVU: advanced controller with profiling and datalogging

ProVu’s large backlit graphic LCD screen is designed to improve user efficiency with many features integrated to reduce commissioning time, simplify operation and maximise uptime.

The versatile display options, USB port, profiling, datalogging and profiling functions are a unique combination on a standard 14 DIN controller.

The MLC 9000+ offers a hot swap facility, a modular option that can be quickly and easily a feature that enables it to be used within 30 seconds due to automatic reconfiguration.

The 4400 and 6400: profiling performances that are hard to beat

4600 and 6400: advanced temperature & process controllers

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Controllers, profilers, indicators...

Chart Recorders: for hard copies of all process activities

West Instruments distributes a wide range of Partlow brand digital (microprocessor based) and analogue circular chart recorders. The range provides reliable operation in rugged environments – from light industrial through to extreme industrial wet applications to industry specific flow and relative humidity applications. Applications include: Plastics forming/Industrial Ovens/Food Processing/Pharmaceutical and Chemical Processing and Pulp and Paper Processing.

Circular chart recorders range in sophistication from a basic one-pen one-process recording instrument to a multiple input, multiple-equation profiling recorder. They are easily programmable via a front-panel keypad or via serial PC communication.

Thyristors: problem solvers in many guises

Thyristor units are available from 10-2600A, including single, two and three phase units. The range includes innovative products to solve all of the most commonly encountered application problems, integrating state-of-the-art technology for the ultimate product performance. There are a wide range of outputs, options and firing types available, including burst and phase angle firing and zero crossing.

Also available is an industrial thyristor package, normally used in applications where many zones are operating (co-extrusion, blow moulding, thermoforming machines and in furnaces to model flat glass etc.)

Sensors: models available for almost every need

With over 30 years supplying experience of sensors, West's range offers a combination of performance and quality that is hard to beat. These high quality temperature sensors can be manufactured in many styles, from a simple welded junction joining two dissimilar metals, to mineral-insulated sensors with waterproof connecting heads and adjustable process fittings.

The diverse range of designs means there will be one ideally suited to just about any installation or application.
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Technical Data

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</table>
Controllers, profilers, indicators...

...and the versatility of a range of ancillary equipment

Chart Recorders: for hard copies of all process activities

West Instruments distributes a wide range of analogue and digital (microprocessor based) chart recorders. The range provides reliable operation in rugged environments - from light industrial through to extreme industrial and military applications and to industry specific flow and pressure monitor applications.

Applications include: Plastics, Food, Pharmaceutical, Consumer and Environmental Chemical Processing and Oil and Gas Processing.

Circular chart recorders range in sophistication from a basic one pen one-process recording instrument to a multiple input, multiple equation profiling recorder.

They are easily programmable using a front panel keypad or via serial PC communication.

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Thyristor units are available from 10-2600A, including single, two and three phase units.

The range includes innovative products to solve most of the most commonly encountered application problems, integrating state-of-the-art technology for the ultimate product performance.

There are a wide range of standard options and firing types available, including plant and load angle firing and zero crossing.

Also available is an industrial thyristor package, particularly useful in applications where many zones are operating in parallel or series and where selecting the firing of the thyristor can make a major cost saving.

With over 30 years experience of sensors, West's range offers a combination of performance and quality that is hard to beat.

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With over 30 years experience of sensors, West's range offers a combination of performance and quality that is hard to beat.

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