With their improved interface, technical functionality and field flexibility, the West 6100+, 8100+ and 4100+ give you the best in comprehensive control for most temperature and process control loops.

**Specification**

**Features**
- **Control Types**
  - Full PID with Pre-tune, Self-tune, manual tuning, or On-Off control. Heat only or heat & cool
  - Selectable from front panel or via digital input, with bumpless transfer
- **Output Configuration**
  - Up to 3 possible, for control, alarm, 24VDC transmitter power supply or retransmit of process value or setpoint
- **Alarm 1 & 2 Types**
  - Process high, process low, SP deviation, band, logical OR / AND. Also 1 loop alarm for process control security. Process alarms have adjustable hysteresis.
- **Human Interface**
  - 4 button operation, dual 4 digit 10mm & 8mm high (6100+, 8100+) and 13mm & 10mm high (4100+) LED displays, optional choice of colours (Red/Red, Red/Green, Green/Red or Green/Green), plus 5 LED indicators
- **PC Configuration**
  - Off-line configuration from PC serial port to dedicated config socket (comms option not required). Configuration Software for Windows 98 or higher. West Part Number: PS1-CON

**Input**
- **Thermocouple**
- **RTD**
  - 3 Wire PT100, 500 per lead maximum (balanced)
- **DC Linear**
  - 0 to 20mA, 4 to 20mA, 0 to 50mV, 10 to 50mV, 0 to 5V, 1 to 5V, 0 to 10V, 2 to 10V.
  - Scaleable -1999 to 9999, with adjustable decimal point
- **Impedance**
  - >10MΩ for Thermocouple and mV ranges, 47KΩ for V ranges and 5Ω for mA ranges
- **Accuracy**
  - ±0.1% of input range ±1 LSD (T/C CJC better than 1°C)
- **Sampling**
  - 4 per second, 14 bit resolution approximately
- **Sensor Break Detection**
  - <2 seconds (except zero based DC ranges), control O/P’s turn off, high alarms activate for T/C and mV ranges, low alarms activate for RTD, mA or V ranges

**Outputs & Operations**
- **Control & Alarm Relays**
  - Contacts SPDT 2 Amp resistive at 240V AC, >500,000 operations
  - Drive capability >10V DC in 500 minimum
- **Triac Outputs**
  - 0.01 to 1 Amp AC, 20 to 280Vrms, 47 to 63Hz
  - 0 to 20mA, 4 to 20mA into 5000Ω max, 0 to 10V, 2 to 10V, 0 to 5V into 500Ω min.
  - Control outputs have 2% over/under drive applied. Accuracy ±0.25% at 250Ω (degrades linearly to 0.5% for increasing burden to specified limits)
- **Transmitter Power Supply**
  - Output 24VDC (nominal) into 9100Ω minimum to power external devices
- **Communications**
  - 2 Wire RS485, 1200 to 19200 Baud, Modbus and ASCII protocol (selectable)
- **Digital Input**
  - Selects between 2 setpoints or Auto/Manual control. Volt free or TTL input
  - 0 to 20mA, 4 to 20mA, 0 to 5V, 1 to 5V, 0 to 10V or 2 to 10V. Scaleable -1999 to 9999. Local/Remote setpoint selected from front panel

**Jumperless Configuration**
- **Auto Detected Hardware**
- **Process & Loop Alarms**
- **Modbus & ASCII Comms**
- **Auto or Manual Tuning**
- **Heat/Cool Operation**
- **Ramping Setpoint**
- **Remote/Dual Setpoint Options**

Available in 1/16, 1/8 & 1/4 DIN Formats
### Operating & Environmental

- **Temperature & RH**: 0 to 55°C (-20 to 80°C storage), 20% to 95% RH non-condensing
- **Power Supply**: 100 to 240V 50/60Hz 7.5VA (optional 20 to 48V AC 7.5VA/22 to 65V DC 5 watts)
- **Front Panel Protection**: IEC IP66 (Behind panel protection is IP20)
- **Standards**: CE, UL & ULC recognised

### Dimensions

#### 6100+

- 48mm x 48mm
- 110mm

#### 8100+

- 48mm x 96mm
- 100mm

#### 4100+

- 96mm x 96mm
- 100mm

- Cut out:
  - 92mm +0.5
Wiring Connections

6100+

Field Reconfiguration

8100+/4100+
Ordering Code

Input Type

| 3 Wire RTD or DC mV | 1 |
| Thermocouple        | 2 |
| DC mA               | 3 |
| DC Voltage          | 4 |

Option Slot 1

| Not fitted | 0 |
| Relay      | 1 |
| DC for SSR | 2 |
| DC 0-10V  | 3 |
| DC 0-20mA | 4 |
| DC 0-5V   | 5 |
| DC 2-10V  | 6 |
| DC 4-20mA | 7 |
| Triac      | 8 |

Option Slot 2

| Not fitted | 0 |
| Relay      | 1 |
| DC Driver for SSR | 2 |
| DC 0-10V  | 3 |
| DC 0-20mA | 4 |
| DC 0-5V   | 5 |
| DC 2-10V  | 6 |
| DC 4-20mA | 7 |
| Triac      | 8 |

Option Slot B (not on 6100)

| Not fitted | 0 |
| Remote Setpoint Input (Full) | R |

Display Colour

| Red Upper & Lower | 0 |
| Green Upper & Lower | 1 |
| Red Upper, Green Lower | 2 |
| Green Upper, Red Lower | 3 |

Power Supply

| 100-240V AC | 0 |
| 24-48V AC or DC | 2 |

Option Slot A

| Not fitted | 0 |
| RS485 Communications | 1 |
| Digital Input | 3 |
| Remote Setpoint Input (Basic) | 4 |

Option Slot 3

| Not fitted | 0 |
| Relay      | 1 |
| DC Driver for SSR | 2 |
| DC 0-10V  | 3 |
| DC 0-20mA | 4 |
| DC 0-5V   | 5 |
| DC 2-10V  | 6 |
| DC 4-20mA | 7 |
| Transmitter Power Supply | 8 |

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