The 6100+ updates our popular 6100 controller. With its improved interface, technical functionality and field flexibility, the West 6100+ is not only backwards compatible with the 6100, but provides a range of new features.

- 1/16 DIN Size
- Jumperless Configuration
- Auto Detected Hardware
- Auto or Manual Tuning
- Heat/Cool Operation Option
- Process & Loop Alarms Options
- Ramping setpoint
- Modbus & ASCII Comms Options
- Dual Setpoint Selection Options
- Two process alarms Options
- Configuration via PC Option
- Replaceable Output & Option Modules

**Features**

**Control Types** - Full PID with Pre-tune, Self-tune, Manual Tuning, or On-Off control. Heat only or heat & cool.

**Auto/Manual** - Selectable from front panel or external selection via digital input, with bumpless transfer.

**Output Configuration** - Up to 3 possible, for control (Heat & Cool), Alarm or retransmit of Process Value or Setpoint.

**Alarm 1 & 2 Types** - Process high, process low, SP deviation, band, logical OR with adjustable hysteresis. Also 1 loop alarm for process security.

**Human Interface** - 4 button operation, dual 4 digit 10mm & 8mm high LED displays with choice of Red/Red, Green/Green or Red/Green plus 5 LED indicators.

**Manual or PC Configuration** - Off-line configuration from serial port to dedicated config socket (comms option not required).

**Transmitter Power Supply (Option)** - 24VDC

**Inputs**

- **Thermocouple** - J, K, C, R, S, T, B, L, N & PtRh20%vsPtRh40%. Scalable within selected range.
- **RTD** - 3 Wire PT100, 50ohm per lead maximum (balanced). Scalable within selected range.
- **DC Linear** - 0-20/4-20mA, 0-50/10-50mV, 0-5/1-5/0-10/2-10V. Scaleable -1999 to 9999, decimal point selectable.
- **Impedance** - >10Mohm for Thermocouple and mV ranges, 47Kohm for V ranges and 5ohm 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 secs (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.

**Remote Setpoint (Option)** - 0-20/4-20mA, 0-5/0-10/2-10V. Scaleable -1999 to 9999; Local/Remote selected from front panel.

**Outputs & Options**

- **Control & Alarm Relays** - Contacts SPDT 2 Amp resistive at 240V AC, >500,000 operations. Output #1 module is now field replaceable
- **Control SSR Outputs** - Drive capability >10V DC in 500ohm min
- **Solid State (Triac) Outputs** - 0.01 to 1 Amp AC 20 to 280V, 47 to 63Hz.
- **Control DC Outputs** - 0-20/4-20mA into 500ohm max, 0-10/2-10/0-5V into 500ohm min. with 2% over and underdrive applied to control outputs. Accuracy typically +/- 0.25%.
- **Communications** - 2 Wire RS485, 1200 to 19200 Baud, Modbus & ASCII protocol (selectable).
- **Digital Input** - Selects between 2 Setpoints or Auto/Manual control using volt free or TTL input

**Operating & Environmental**

- **Temperature & RH** - 0 to 55°C (-20 to 80°C storage), 20% to 95%RH non-condensing.
- **Power Supply** - 100-240Vac 50/60Hz (standard) 7.5VA ; 20-48Vac 50/60Hz (option) 7.5VA & 22-65Vdc (option) 4W.
- **Front Panel Protection** - IEC IP66 (Behind panel protection is IP20).
- **Standards** - CE, UL & ULc. recognized.
### Order Code

<table>
<thead>
<tr>
<th>Input Type</th>
<th>Option Slot 1</th>
<th>Option Slot 2</th>
<th>Option Slot 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Wire RTD or DC mV</td>
<td>Not fitted</td>
<td>Not fitted</td>
<td>Not fitted</td>
</tr>
<tr>
<td>Thermocouple</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>DC mA</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>DC Voltage</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Display Color

<table>
<thead>
<tr>
<th>Power Supply</th>
<th>Option Slot A</th>
<th>Option Slot B</th>
<th>Option Slot C</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-240V AC</td>
<td>Not fitted</td>
<td>Not fitted</td>
<td>Not fitted</td>
</tr>
<tr>
<td>24-48V AC or DC</td>
<td>RS485 Communications</td>
<td>Basic Remote Setpoint Input</td>
<td>Transmitter Power Supply</td>
</tr>
</tbody>
</table>

#### Dimensions

- Cut-out: 45 x 45mm +0.5 – 0.0
- 110mm
- 48mm

#### Field Reconfiguration

**Input**

Jumper-free configuration for any type (no extra parts required)

- Option Slot 1
  - Part Number
    - Relay Output: PO1-C10
    - Linear mA/V DC Output: PO1-C21
    - SSR Driver Output: PO1-C50
    - Triac Output: PO1-C80

- Option Slot 2
  - Part Number
    - Relay Output: PO2-C10
    - Linear mA/V DC Output: PO2-C21
    - SSR Driver Output: PO2-C50
    - Triac Output: PO2-C80

- Option Slot 3
  - Part Number
    - Relay Output: PO2-C10
    - Linear mA/V DC Output: PO2-C21
    - SSR Driver Output: PO2-C50
    - 24VDC Transmitter PSU: PO2-W08

#### Option Slot A

- Part Number
  - Digital Input: PA1-W03
  - Remote Setpoint Input (Basic): PA1-W04
  - RS485 Comms: PA1-W06

---

**Connection Details**

- Universal Input
- Option 1
- Option 2
- Option 3
- Transmitter PSU
- DC or SSR Drive
- N/C, C, N/O Relay
- Triac
- Digital Input
- RS485 Comms
- Basic Remote Setpoint Input

**Dimensions**

- Cut-out: 45 x 45mm
- Connection: 48mm x 110mm

---

**ISE, Inc.**

- 10100 Royalton Rd.
- Cleveland, OH 44133 USA
- Tel: (440) 237-3200
- Fax: (440) 237-1744
- http://iseinc.com