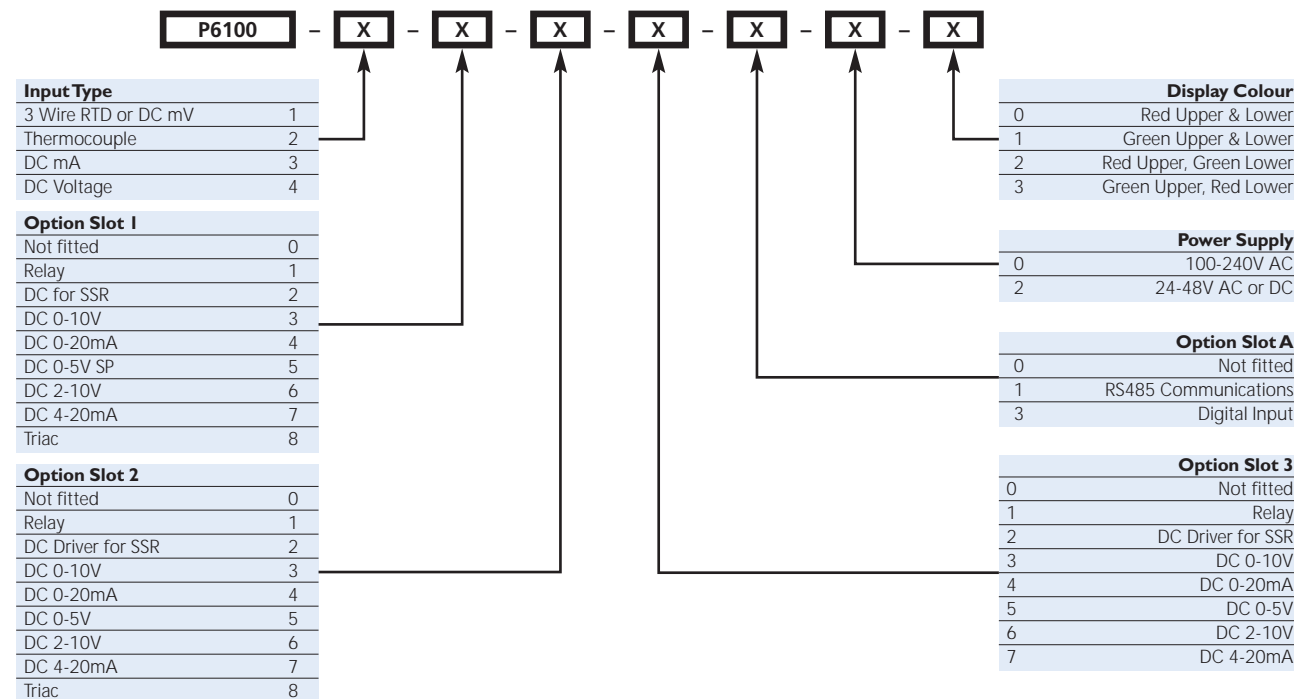


Technical Data

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 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. Also 1 loop alarm for process control security. Process alarms have adjustable hysteresis.
Human Interface	4 button operation, dual 4 digit 10mm & 8mm high 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 serial port to dedicated config socket (comms option not required)
Input	
Thermocouple	J, K, C, R, S, T, B, L, N & PtRh20%vsPtRh40%.
RTD	3 Wire PT100, 50Ω per lead maximum (balanced)
DC Linear	0-20mA, 4-20mA, 0-50mV, 10-50mV, 0-5, 1-5, 0-10, 2-10V. Scaleable -1999 to 9999, with adjustable decimal point
Impedance	>10MΩ for Thermocouple and mV ranges, 47KΩ for V ranges and 5MΩ 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
Outputs & Options	
Control & Alarm Relays	Contacts SPDT 2 Amp resistive at 240V AC, >500,000 operations
Control SSR Outputs	Drive capability >10V DC in 500Ω minimum
Solid State (Triac) Outputs	0.01 to 1 Amp AC, 20 to 280V, 47 to 63Hz
DC Outputs	0-20mA, 4-20mA into 500Ω max, 0-10V, 2-10V, 0-5V 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)
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
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 5W)
Front Panel Protection	IEC IP66 (Behind panel protection is IP20)
Standards	CE, UL & ULc recognised

Order Code



In accordance with our policy of continuous improvement, we reserve the right to change specifications from those shown in this document.

West Instruments

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Available From:

The **6100+** temperature controller...

6100+



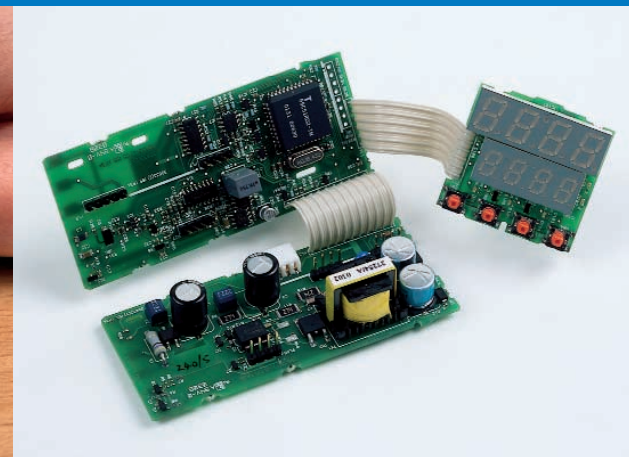
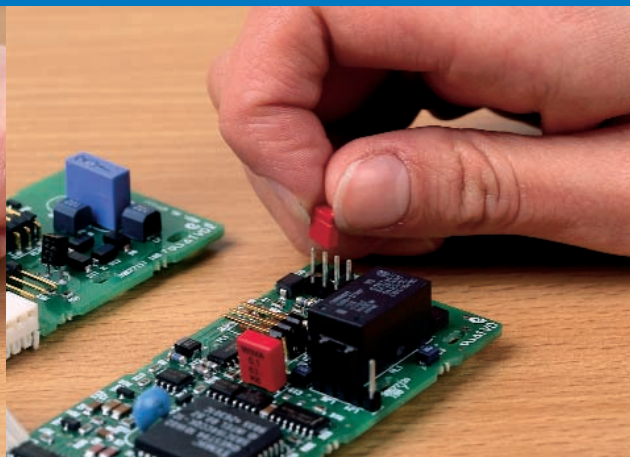
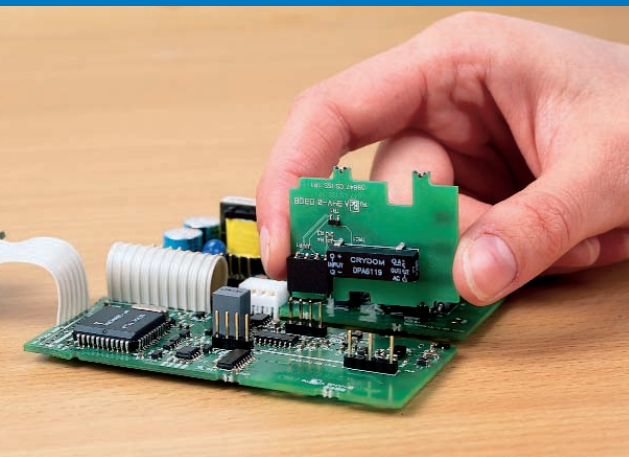
...so **adaptable**, you won't need anything else



Why the 6100+?

Because it has all the **features** of the 6100 and much more

The 6100+ is the first of a new generation of temperature controllers. It takes ease of use and flexibility to new levels. Look at all the advantages it offers:



Stock fewer types of controller *All outputs plug-in*

Maintaining stocks of a wide range of controller types for all possible applications is expensive, difficult to manage and can cause major problems if the right controller is not readily available. But the 6100+ avoids this problem. All output cards are plug-in: relay, SSR, triac and linear. This means just one base unit can be customised to each application as required. What's more, with our standard three-day lead time, inventory can be further reduced.

Stock levels are reduced and re-ordering is simplified.

Avoid errors *NO link jumpers*

Many controllers still use link jumpers to set input and output types. The trouble is, changing link jumpers is awkward, time-consuming and can easily result in error. But the 6100+ has solved this problem by eradicating link jumpers altogether.

No link jumpers means one less area for potential error.

Reduce set up times *Auto-hardware configuration*

Fitting new output cards to a controller often involves a menu set-up operation. It may only take five minutes, but how much does that add up to each year? The 6100+ gets straight down to business. As soon as the output cards are fitted it automatically configures itself.

Less time spent on each controller saves money and makes sense.

Customise the operator menu *Easy to set up via PC*

Many controllers can, at the very least, present operators with a bewildering array of unnecessary information and, at worst, allow access to parameters that could potentially cause big problems. The 6100+ takes a more intelligent approach, enabling the operator menu to be customised so that it displays only what is needed.

Too much information can be as bad as too little – by using our PC software the 6100+ operator menu can be tailored to precisely what is required.

Simplify operation *Improved easy-to-use HMI*

Developing the 6100+ to incorporate so many new advantages also provided the ideal opportunity to review the HMI (human machine interface). The result is that the 6100+ has some of the best HMI characteristics available, making the whole set up process quick and easy.

6100+

Making things complicated is easy – the **clever trick** with the **6100+** is to **make it simple**.