



# Auto-Adaptive PID Controller N1200



- Designed for high performance control
- Automatically balances process disturbances
- Ensures responsiveness in dynamic processes
- Suitable for complex temperature profiles

The **N1200** process controller was designed for high performance control in the most demanding applications.

Its advanced and consolidated Auto-Adaptive PID algorithm ensures fast and highly accurate response in very dynamic processes with complex profiles.

**N1200** has the fastest sampling rate among competitors, which allows the PID control to actuate with great responsiveness ensuring the correct process dynamics. Both electronic robustness and anti-flame material

enclosure comply with the main world-class approvals for industry devices.

Advanced configuration of all parameters and fine tuning can be easily and quickly achieved via the USB port by using the free-of-charge **NOVUS** configuration software.

Besides the standard parameters settings, **N1200** also performs customized ramp and soak temperature profiles by programming up to 20 user-configured recipes or up to 180 segments.




**RAMPS AND SOAKS**  
20 programs with 9 segments each



**DETACHABLE FRONT PANEL**  
Easy commissioning



**HIGH SAMPLING RATE**  
Ideal for dynamic processes



**PROTECTION AND SAFETY**  
Anti-flame material UL94 V-2



**USB CONFIGURABLE**  
Device configurable via USB with NOVUS free software

<b>Input Type</b>	TC J, K, T, N, R, S, B, E, Pt100 0-20 mA, 4-20 mA, 0-50 mV, 0-5 Vdc, 0-10 Vdc
<b>Accuracy</b>	Thermocouples J, K, T: 0.25 % of span $\pm 1$ °C Thermocouples N, R, S, B: 0.25 % of span $\pm 3$ °C Pt100, 0-20 mA, 4-20 mA, 0-5 Vdc, 0-10 Vdc: 0.2 % of span
<b>Input Resolution</b>	32767 levels (15 bits)
<b>Sampling Rate</b>	55 samples per second
<b>Analog Output</b>	0-20 mA or 4-20 mA
<b>Output Resolution</b>	31000 levels
<b>Control Type</b>	PID, PI, PD, P On/Off
<b>Control Action</b>	Heat or Cool
<b>Control Output Type</b>	SSR Pulse 4-20 mA control Relay
<b>Alarm Types</b>	Minimum, Maximum, Differential, Differential Low, Differential High, Open Sensor, Ramp and Soak Event
<b>Open Sensor Detection</b>	Loop Break / Heater break detection

<b>Optional</b>	Relay, Two Digital Inputs or Outputs, RS-485, Heater break detection
<b>Communication</b>	RS485 Modbus optional
<b>Ramp and Soak Programs</b>	20 programs with 9 segments each
<b>Safety</b>	Password protected configuration
<b>Configuration Interface</b>	USB type Mini B (powered)
<b>Power Supply</b>	100-240 Vac/dc 12-24 Vdc
<b>Maximum Consumption</b>	9 VA
<b>Front Panel</b>	IP65 Polycarbonate (PC) UL94 V-2
<b>Enclosure</b>	IP20 48 x 48 x 110 mm (DIN 1/16) ABS+PC UL94 V-0
<b>Operating Conditions</b>	5 to 50 °C (41 to 122 °F) and 0 to 80 % RH
<b>Approvals</b>	CE, RoHs, Reach, UL and cUL