



## PID Controller with LCD Display



### N1050



### Alphanumeric LCD Display

- High contrast multicolor LCD display
- Distinguished multi-angle viewing
- Compact depth for restricted space
- Elegant design to machines
- Ramp and Soak program
- Timer function

**N1050** is an advanced high performance PID temperature controller featuring a vivid LCD display in a modern design package. It combines the proven robustness of **NOVUS** PID algorithm with a large and bright easy-to-read multicolor 11-segment LCD display with alphanumeric mnemonics and crystal clear status signaling.

Besides the PID auto-tuning capability, **N1050** outputs PWM control mode through pulse or relay. Up to three optional output relays can be selected. It also features 5 ramp-and-soak profile programs, soft start output and timer function which complement the advanced features of the

controller. With password protected, all parameters are configurable by the display menu, via USB port or optional RS485 Modbus interface.

Easy to install and maintain due to its detachable connector, **N1050** offers the lowest power consumption in the market. Housed in anti-flame material, it has 48x48 mm (DIN 1/16) format and low profile front panel. Suitable for hostile environments, it complies with standard EMC regulations, providing robustness and reliability including untapped temperature applications.



### Detachable Connector

Easy commissioning



### Lowest Power Consumption

Use just the energy needed



### Protection and Safety

Anti-flame material  
UL94 V-2



### USB Configurable

Device configurable via USB with **QuickTune** free software

## Technical Specifications

|                          |   |
|--------------------------|---|
| <b>Display</b>           | Alphanumeric 11-segment LCD type, high contrast multi viewing angle |
| <b>Input Type</b>        | Thermocouple J, K T, S and Pt100                                    |
| <b>PID Features</b>      | PWM<br>Auto tune  |
| <b>Control Action</b>    | Heat or cool  |
| <b>Output Control</b>    | 1 pulse for SSR and relay<br>3 relays (optional)                    |
| <b>Ramp &amp; Soak</b>   | 5 programs with 4 segments  |
| <b>Sampling Period</b>   | 100 ms  |
| <b>Communication</b>     | RS485 Modbus RTU (optional)   |
| <b>Power Consumption</b> | Max. 6 VA   |

|                             |   |
|-----------------------------|---|
| <b>Special Functions</b>    | Soft Start<br>PID loop break alarm<br>Ramp and soak event<br>2 alarms (7 alarm types)<br>Timer function |
| <b>Configuration</b>        | Software <b>QuickTune</b> , via USB (micro-B type)  |
| <b>Certifications</b>       | CE, UL and cUL  |
| <b>Power Supply</b>         | 100-240 Vac/dc or 12-24 Vdc (optional)  |
| <b>Operating Conditions</b> | Temperature: 0 to 50 °C (32 to 122 °F)<br>Humidity: 80 % @ 30 °C (86 °F)                                |
| <b>Front Panel</b>          | IP65<br>Polycarbonate (PC) UL94 V-2   |
| <b>Enclosure</b>            | 48x48 mm (DIN 1/16)<br>ABS+PC UL94 V-0  |

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