



The art of innovation

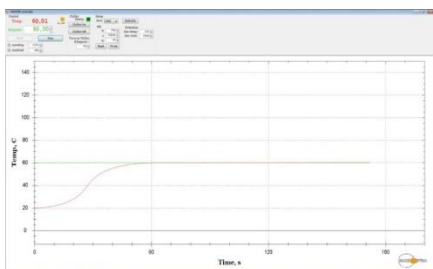


Model of Temperature Controller  
MTDC600

MicOptik's MTDC600 series digital temperature controllers are ideal instruments for temperature regulation of Heating/Cooling Devices in processes where temperature stability is critical. MTDC600 series is a standard PID-PID temperature controller – realizes more powerful control with super high-speed sampling cycles of 50ms and  $\pm 0.3\%$  display accuracy. It supports diverse control modes including heating/cooling simultaneous control, automatic/manual control and communication functions.

In addition, MTDC600 series covers all necessary features for high performance temperature controllers – that is, diverse input sensor support, multi SV setting, high resolution display, built-in power supply, USB2,0 communication port.

MicOptik's HCS Software supplied with MTDC600 series digital temperature controllers. HCS Software provides a convenient platform for all possible experiments. Temperature limits, Thermopile features, control essentials and others can be easily selected through the relevant menus. The user-friendly interface and other advanced features provide easy and efficient workflow.



MicOptik's HCS Software

## MicOptik Digital Temperature Controller MTDC600 Series

### MTDC600 Technical Specification:

- Heating and cooling control of thermoelectric devices;
- Manual Control or Digital Control;
- **Inputs for the following sensors:**  
RTD: JPT 100  $\Omega$ , DPT 100  $\Omega$ , DPT 50  $\Omega$ , CU 100  $\Omega$ , CU 50  $\Omega$ , and Nikel 120  $\Omega$  (6 types)  
Thermocouples: K, J, E, T, L, N, U, R, S, B, C, G, and PLII (13 types)  
**Analog:** Voltage: 0 to 100mV, 0 to 5V, 1 to 5V, and 0 to 10 V (4 types)  
Current: 0 to 20mA and 4 to 20mA (2 types);
- **Control Output:**  
Relay (OUT1, OUT2: 250VAC 3A 1A)  
SSR (Max.11VDC $\pm$ 2V 20mA)  
Current (DC4-20mA or DC0-20mA selectable )
- **Several regulation modes :**  
On/ Off, P, PI, PD, PID and PID with auto tuning;
- Auto-tuning mode settings;
- Thermal profiles options;
- Sensor brake alarm;
- Heater burnout alarm;
- Settable Alarms (31 different modes )
- Multi SV setting function (Max. 4 ) – selectable via digital input terminals;
- 4 Digits and high luminance LED Display;
- Sampling cycle 0,05s;
- Control cycle 0,05s;
- Digital control via USB2.0 Communication;
- HCS software;
- Windows compatible operation systems;
- Export data in any requested format (excel, sql etc...);
- **Built-in power supply :**  
Options of DC Voltage: 3,3; 5; 12; 15; 24; 36; 48; (other per request);  
Options of Watts: 15...320 (other per request);
- Reverse polarity function for TEC;
- Universal power supply 100 - 240 VAC, 50/60Hz

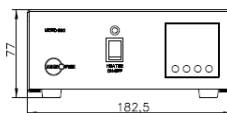


MicOptik's Temperature Controller Model: MTDC600

### MTDC600 Features:

- Programmable Temperature Controller
- High precision and high resolution temperature measurement and control
- High-speed sampling cycle (10 times faster compared to existing models); 50ms sampling cycle and  $\pm 0.3\%$  display accuracy
- Excellent visibility, height of digits
- High performance control with heating/cooling control and automatic/manual control modes
- USB2.0 communication
- Built-in power supply
- 3 Years Warranty

### MTDC600 Overall Dimensions



More information! Please contact us [info@microptik.eu](mailto:info@microptik.eu)