



*The art of innovation*

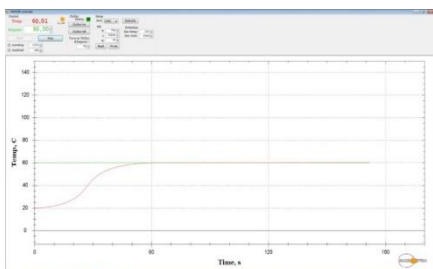


Model of Temperature controller for Thermo Electric (Peltier) Elements  
Model: MTDC600TE

MicroOptik's MTDC600TE series digital temperature controllers are ideal instruments for temperature regulation of Thermoelectric Heating/Cooling Devices in processes where stability is critical. MTDC600TE series is a standard 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, MTDC600TE 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.

MicroOptik's HCS Software supplied with MTDC600TE 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.



MicroOptik's HCS Software

## Thermo Electric Elements Temperature Controller MTDC600TE Series

### MTDC600TE 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);
- **Several regulation modes :**  
On/ Off, P, PI, PD, PID and PID with auto tuning;
- Auto-tuning mode settings;
- Sensor brake alarm;
- Heater burnout alarm;
- Settable Alarms (31 different modes )
- Thermal profiles options;
- 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

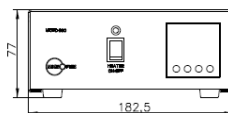


MicroOptik's Temperature Controller for Thermo Electric (Peltier) Elements Model: **MTDC600TE**

### MTDC600TE Features:

- Programmable Temperature Controller
- High precision and high resolution temperature measurement and control
- High-speed sampling cycle (10 times faster compared with 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 for Thermo Electric Elements
- 3 Years Warranty

### MTDC600TE Overall Dimensions



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