

[OEHTC-100]

## Two-Channel Heater Temperature Controller with touch screen



*OEHTC-100 Heater Temperature Controller (Bench-top)*



*OEHTC-200 Heater Temperature Controller (OEM)*

### Features:

- Temperature ranges from 20 to 250°C
- With temperature stability of 0.02°C
- For resistive heaters up to 15W/24V
- Controls two independent heaters simultaneously
- With thermistor feedback for each channel
- Configurable PID parameters
- Stand-alone operation with touchscreen display (Bench-top version)
- Computer-operated with user interface
- Available with LED indicator display (OEM version)

### Applications:

- As stand-alone bench-top device
- For use with resistive cartridge heaters
- Where precision temperature control is required
- OEM version for integration in systems
- During testing and measuring
- In R&D Projects
- In production

## Product description:

The new Two-Channel Heater Temperature Controller with touch screen from O/E Land is designed to be used with resistive heating elements, such as the cartridge heaters. With its control temperatures up to 250°C, and stability of 0.02°C, our controller is suitable for wide range of applications, where stable and reliable operation is needed. Temperature readings can be both displayed in degrees Celsius or Fahrenheit.

The device can control two heaters simultaneously, with a high precision and stability. For each heater, a feedback thermistor is used for monitoring the temperature. The controller utilizes a touch-screen display (OEHTC-100, bench-top version), which allows the user to set and adjust all operational parameters, including the proportional, integrative, and derivative control gain values (PID). The main screen of the display shows the real-time temperature value per the selected channel, as well as the pre-set target value.

The physical connection between the controller and the heaters is established through specialized HIROSE connectors on the back panel of the device. There is one connector per channel, totally two for both channels. Both the heater and its thermistor per channel are attached to a single connector, using a 4-wire cable.



**OETTC-100 Heater Temperature Controller (Bench-top)**



**OETTC-200 Heater Temperature Controller (OEM)**

The OEM version of the controller (OEHTC-200) comes as a PCB, which can be either connected to a computer, using the USB port, or it can be operated in stand-alone mode. Two potentiometers on the board are available for setting up the temperatures of each channel. Once all the parameters are set, the stand-alone operation of the controller can be easily enabled, using the integrated DIP-switch.

As an option, a LED display can be provided with the main board, which is offering simple indication of target and the current temperatures for both channels. Another optional add-on is the touch-screen display, which allows the user to set and adjust all operational parameters, including the PIDs, thus eliminating the need of a computer. The main screen of the display shows the real-time temperature value per the selected channel, as well as the pre-set target value.

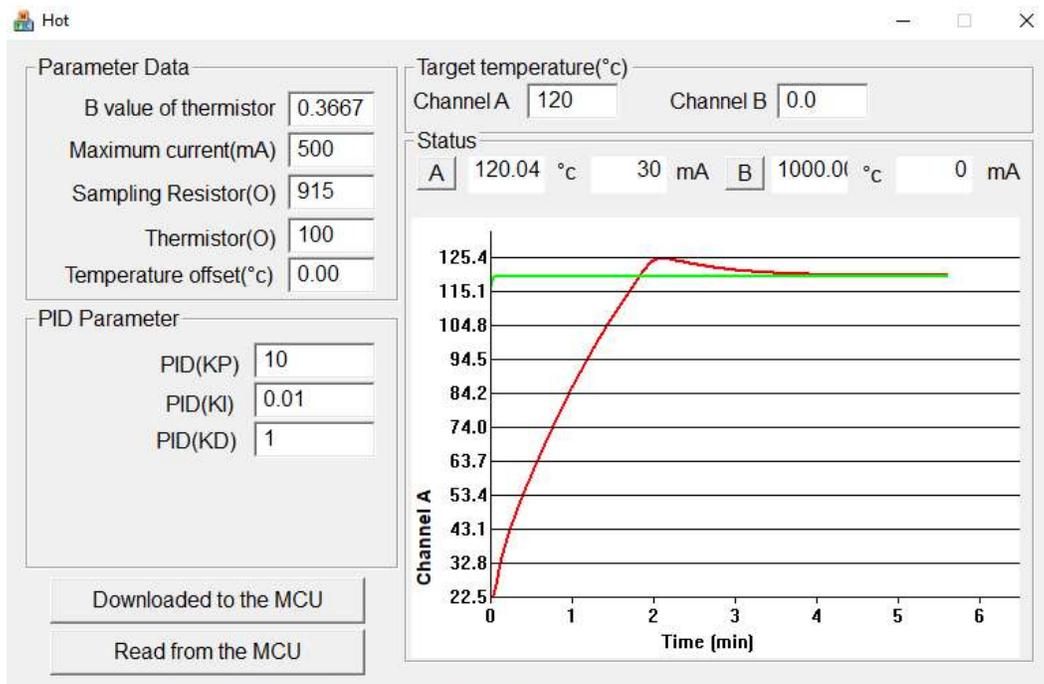
The compatible connectors and wiring for the heaters, thermistors, and between the optional devices (where applicable), are provided for the OEM version.



*Touchscreen display for OEHTC-200 (optional)*

The Bench-top Heater Temperature Controller can be also operated via a user-friendly graphic interface, which is available as an option. An USB connection to a computer is required. The interface features the full range of parameters to be setup and adjusted, as well as a real-time live graphic display of the temperature-to-the elapsed time curve.

For the OEM version, this interface is included.



*User interface for OEHTC-200*

**Product specifications:**

Parameters	Unit	OEHTC-100	OEHTC-200
Type	-	Bench-top	OEM
Channels	-	Two independent channels (A and B)	
Temperature control range (per channel)	°C	20-250	
Set Point Resolution	°C	0.01	
Temperature Stability	°C	0.02	
Input Voltage	V	100-240 VAC	12-36 VDC
Input Power	W	25	
Output Power (per channel)	W	15	
Output current (per channel)	A	1	
Output voltage (per channel)	V	24	
Sensor Types	-	Thermistor, 100 Ω; PTC	
Output connector (per channel)	-	HIROSE HR10A-7R-6S	Compatible connectors & wiring provided
Required mating connector (per channel)	-	HIROSE HR10A-7P-6P	
7-segment LED display		N/A	Optional
Touchscreen display with interface		Integrated	Optional
User interface		Optional	Included
Connectivity	-	USB 2.0, Type B Plug	
Operating temperature	°C	12-40	
Storage Temperature	°C	0-50	
Dimensions (W x H x L)	mm	190 x 90 x 300	85 x 25 x 8.5
Weight	kg	2.3	0.065

**Ordering number:**

<b>OEHTC-100:</b>	Two-Channel Heater Temperature Controller – Bench-top
<b>OEHTC-200:</b>	Two-Channel Heater Temperature Controller – OEM version