

TC Laboratory Series

Ultra-stable Temperature Controller Instrument



FEATURES

- Two models: 5 A and 10 A output current
- Compliance voltage of 15 V
- Temperature stability better than 0.0009°C
- Compatible with a variety of sensors
 - » Thermistors
 - » 2, 3, or 4-wire RTDs
 - » Linear voltage sensors
 - » Linear current sensors
 - » **NEW!** IR sensors for measuring liquids or solids without contact or contamination
- Touchscreen with intuitive user interface
- Safety features protect your research
 - » Adjustable current limit, with Brick-Wall Never-Exceed circuitry
 - » Password protection available to lock out a selectable control set
 - » Over-temperature protection circuit
 - » Temperature limits on the load
 - » Shutdown signal to the QCL/laser driver load to protect against over or under temperature situations.
- Autotune sets ideal control parameters for optimal time to temperature or disturbance rejection
- Complete command set for remote control from computer

FEATURES

- LabVIEW* interface
- Auxiliary input for heatsink sensor
- Feature-rich for research projects
 - » USB and Ethernet interfaces with software included
 - » Auto temperature scan function
 - » Data collection using a computer or USB flash drive
 - » Field upgradeable firmware
 - » Sophisticated error handling
 - » Save and recall functions for specific set ups
- CE compliant
- All software and instrument documentation, as well as additional data storage, provided on a USB flash drive
- Optional rack mount kit: 2 U height, ½ rack width
- AC input switch selectable from 115/230 ±15% VAC with a 50/60 Hz power-line frequency

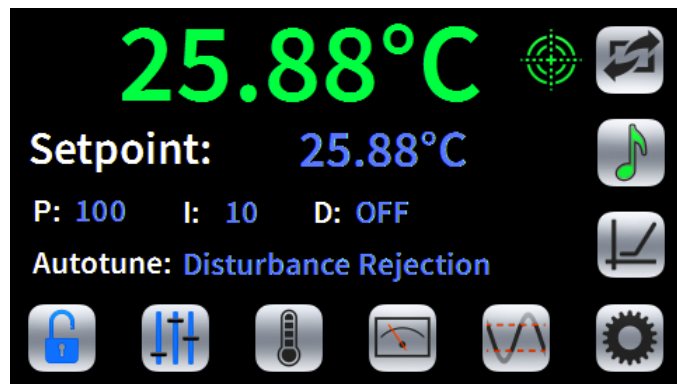
* LabVIEW is a trademark of National Instruments.



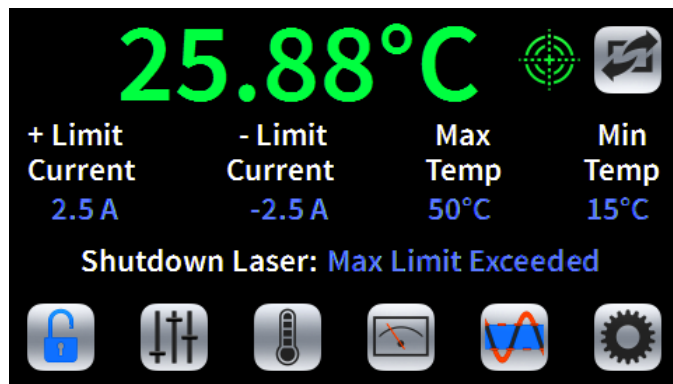
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INTUITIVE USER TOUCH SCREEN INTERFACE



Control Screen

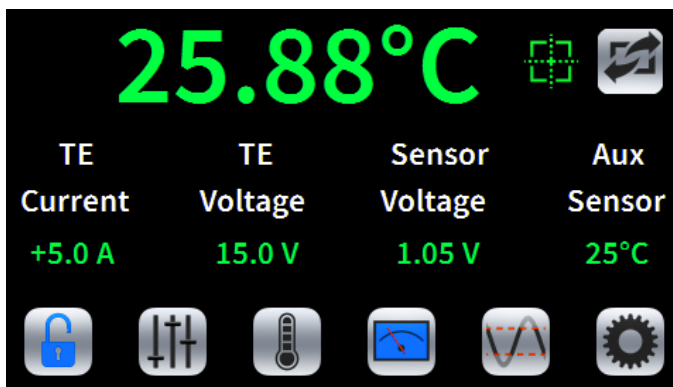


Limit Screen

APPLICATIONS

The advanced and reliable circuitry of the TC LAB Series instruments achieve better than 0.0009°C temperature stability.

The ultra-stable temperature controller instruments are particularly reliable for research in electro-optical, medical, spectroscopy, and defense systems wherever precision temperature control is required.



Monitor Screen

ELECTRICAL SPECIFICATIONS

TEMPERATURE CONTROLLER SPECIFICATIONS

DRIVER OUTPUT CURRENT	MIN	TYP	MAX	UNIT	NOTE
Output Current		5 or 10		A	
Compliance Voltage		15		V	Internal Supply Voltage can be adjusted from the front panel.
Stability, 1 Hour		0.0009		°C	25°C Ambient
Stability, 24 Hours		0.002		°C	25°C Ambient
Temperature Coefficient	5	10	18	ppm / °C	

ORDERING INFORMATION

TC10 LAB	10 A, 15 V Temperature Controller Instrument
TC5 LAB	5 A, 15 V Temperature Controller Instrument
RCKMT-LAB SNGL	19" Single Unit Rack Mount Kit
RCKMT-LAB DUAL	19" Dual Unit Rack Mount Kit
IR SENSE KIT	IR sensor, Bracket, and Tripod
THERMISTORS	Various Thermistors Available
CABLES & CONNECTORS	Various connector kits and cables are available

Free, effective, and responsive technical support is available.

Sales@teamWavelength.com
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