

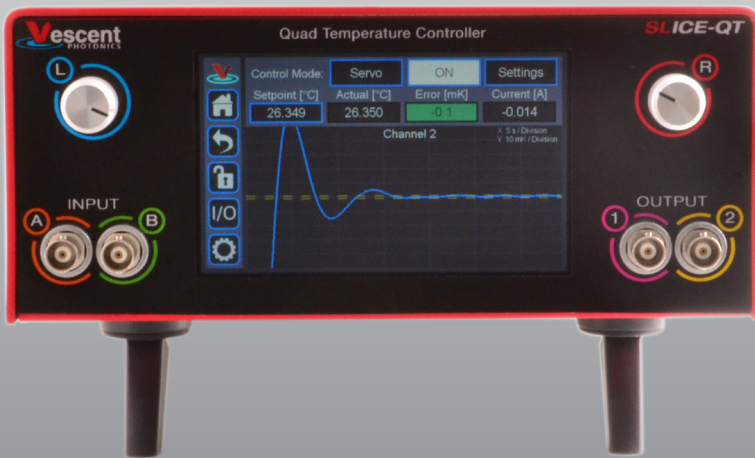
# SLICE-QT

## Four-channel PID Temperature Controller

The SLICE-QT features four independent PID temperature loops for controlling TECs or heaters with high stability and precision. With fully adjustable PID loop parameters, high-power output capacity, and configuration flexibility, it is possible to control the temperature of a variety of plants with sub-millikelvin temperature stability.

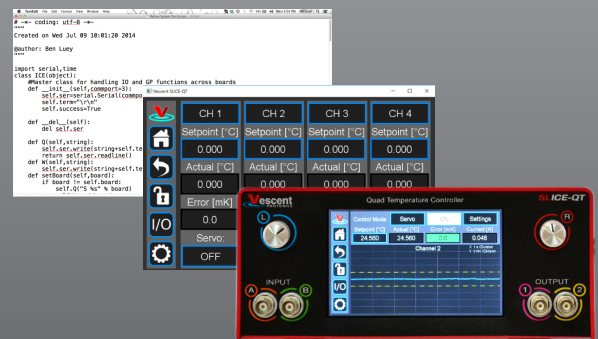
The SLICE-QT is highly configurable through the touch screen, a host GUI, or through serial commands. Easily control operating parameters such as set point temperature, maximum and minimum temperature limits, and slew rate. Diagnostic signals such as the plant temperature, temperature error, and current output are available on the front panel so you always know how your loop is performing.

With compliance voltages up to 18 V and current outputs up to 6 A, our proprietary power supply technology makes it easy to control a variety of different plants.



*SLICE-QT temperature controller*

*Control SLICE through the front panel, a PC GUI, or API commands over USB*



### Features:

- Four PID temperature control loops
- Up to 35 W user-routable capacity
- Assignable front-panel I/O
- Sub-millikelvin stability
- ~1 mK set point resolution
- Accepts all standard AC line voltages
- Large, bright touch screen display
- PC GUI, API, or touch screen control

### Applications:

- Diode lasers, tapered amplifiers, SOAs
- Nonlinear & photonic crystals
- Photonic integrated circuits (PICs)
- Gas cells, optical cavities, and interferometers
- WDM devices

# SLICE-QT Performance Specifications

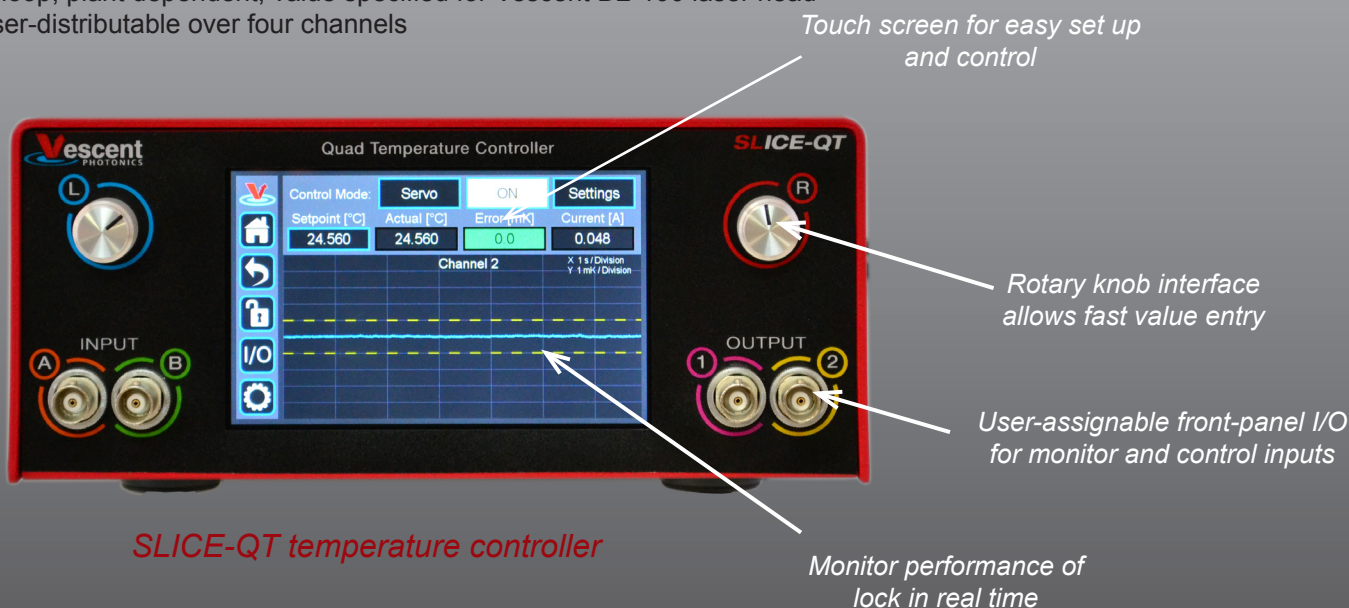
Performance	
Channels	4
Loop Filter	PID, adjustable time constants and gains
Control Range <sup>1</sup>	-10 to +120°C
Compatible Transducer	TEC or resistive heater
Compatible Sensor	Negative Thermal Coefficient (NTC) Thermistor
Temperature Stability <sup>2</sup>	±0.2 mK over 1 hr
Set Point Resolution	~1 mK
Load Limits	35 W total <sup>3</sup> 6 A/channel 18 V Compliance Voltage
Slew Rate Control	Yes
Interface	
Control	Front-panel touch screen, PC GUI, Serial API
Connections	Host control: USB Type B
Power Input	100 - 240 VAC; 50 - 60 Hz

All specifications subject to change without notice.

<sup>1</sup>Proper choice of thermistor can extend this range

<sup>2</sup>In loop; plant dependent; value specified for Vescent D2-100 laser head

<sup>3</sup>User-distributable over four channels



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