### **Laser Diode Technologies**

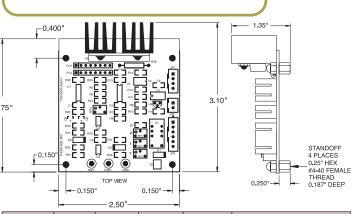
See Page 499

## **3W TEC Controller Module**

The TCM1000T TEC Controller Module regulates current through a Thermalelectric cooler (TEC), maintaining a constant temperature of a device, typically a laser diode.

## TCM1000T Specifications

- TEC Current Range: -1A to +1A
- Max Output Power: 3W
- Compliance Voltage: >3V
- **Stability:** ±0.1°C (24 hrs. @ fixed ambient)
- Input Power: +5VDC @ 1.25A Max.



£ 150.60 € 222,30 ¥ 2,282.50

**RMB** 



### **TCM1000T Features**

- High Precision Temperature Control
- Provides 3W of Power, Current Limited to 1A
- Maintains Temperature Based on Feedback Provided From a 10k NTC Type Thermistor Sensor
- Maximum Adjustment Range is 5K to 25K
- Interface Cables Included
- OEM Plug-In Version Available (Call for Details)

# **OEM VCSEL Diode Drivers with Current Modulator: 1Hz to 10kHz**

DESCRIPTION

3W TEC Control Module

#### **OEM VCSEL Diode Drivers**

■ Output Current: 0-25mA

ITEM #

TCM1000T

- Compliance Voltage: >5V
- Integrated Current Modulator: 1Hz to ≥10kHz
- Temperature Control: 10-40°C (VITC002 only)
- Adjustable Hardware Current Limit
- Monitor Current Output
- On-Board Laser Diode Socket
- Open Output Detection and Safety Interlock
- Complete With Universal Input 5VDC Power Supply





These Laser Diode Controllers are ideally suited for powering the expanded selection of Vertilas VCSEL diodes presented on pages 488 and 489. The Vertilas laser diodes can be plugged directly into the on-board sockets. Any other VCSEL diodes with grounded laser anode can be operated using a shielded DB9 cable.

These controllers are designed to supply the low drive current typical of a VCSEL. Special attention has been paid to ensuring an extremely clean low

noise drive current to prevent damage to highly sensitive VCSEL diodes.

An integrated current modulation feature allows high-speed sweeping of the wavelength of the VCSEL for spectroscopy applications. Alternatively, an analog input enables external modulation of the wavelength. An adjustable upper limit on the modulation current protects the laser diode from accidental damage when using either of these features.

A temperature window indicator LED shows when the diode leaves a desired operation temperature range, thus providing an indication that an unwanted wavelength-shift may have occurred (VITC002 only). Two other features, an open circuit detector and an interlock, both enhance the safe operation of a sensitive VCSEL diode.

ITEM #	\$		£		€		RMB		DESCRIPTION
VLDC002	\$	360.00	£	226.80	€	334,80	¥	3,438.00	VCSEL Driver w/o Temp. Controller, Socket for VCLXXXX on Board
VITC002	\$	420.00	£	264.60	€	390,60	¥	4,011.00	VCSEL Driver w/ Temp. Controller, Socket for VCTXXXX on Board

Benchtop

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Laser/TEC Drivers Platforms

Laser/ TEC Drivers

Laser/TEC OEM Drivers

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