

Temperature Controller ($\pm 16\text{A}/\pm 30\text{V}$)

BRM-6202

BRM-6202 is a Peltier driver temperature controller, Which Supports up to $\pm 16\text{A}$ output current.

BRM-6202 is designed with Dual Control Modes:

- Current Control Mode: Delivers unidirectional current for heating/cooling
- Temperature Control Mode: Auto-adjusts current magnitude/direction via PID to maintain setpoint

The unit features I/O interface for external sensor connections:

- PT100 : Precise Peltier temperature monitoring
- NTC: Heat sink/extended temperature measurement



Features

- Wide Operating Voltage Range: $\pm 30\text{V}$ for flexible power compatibility
- Dual Control Modes:
 - Current Control: Direct drive for Peltier devices
 - Temperature Control: 0.1°C precision with PID regulation
- Multi-NTC Support: Configurable parameters for various NTC models
- Versatile Device Compatibility:
 - Peltier modules (TEC)
 - Thermistor-based components

Applications

- Laser Diode Precision Temperature Control
 - Stable wavelength locking for optical communications
 - High-accuracy thermal management of DFB/FP lasers
- Industrial Temperature Regulation
 - Process control systems requiring $\pm 0.1^\circ\text{C}$ stability
 - Equipment thermal stabilization
- Nonlinear Crystal Temperature Stabilization
 - Critical for frequency doubling/SHG applications
 - LiNbO_3 , KTP crystal oven control
- Photodetector Cooling
 - Dark current reduction in APD/PMT devices
 - IR detector performance optimization
- PN Junction Characterization
 - Semiconductor material research
 - Temperature-dependent I-V curve analysis

What's included

#	Part Description	Model	Qty.
1	Temperature Controller(±16A/±30V)	BRM-6202	1
2	Power cable	BC-105075	1

Specifications

Model	BRM-6202
Output Current	±16A
Output Voltage	±30V
Temperature Resolution	0.1°C
Operating Mode	Current / Temperature control
Heating and Cooling Devices	Peltier / Thermal Resistance
Sensor Interface	1 channel PT100 interface 1 channel NTC interface
Temperature Range	-100°C ~200°C (PT100) -6°C ~150°C (NTC)
Power Supply	110/220VAC
Dimensions	230 × 275 × 135mm

Dimensions (mm)

