Spectrometer

Optical power meter

Light source

LD Driver & TEC Controller

Solution and system

Accessories

Temperature Controller (±4A/±21V)

BRM-6201

BRM-6201 is a Peltier driver temperature controller, Which Supports up to ±4A output current.
BRM-6201 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: ±21V 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 ±0.1° 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

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What's included

#	Part Description	Model	Qty.
1	Temperature Controller(±4A/±21V)	BRM-6201	1
2	Power cable	BC-105075	1

Specifications

Model	BRM-6201
Output Current	±4A
Output Voltage	±21 V
Temperature Resolution	0.1℃
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℃ ~200℃ (PT100) -6℃ ~150℃ (NTC)
Power Supply	110~220VAC
Dimensions	180×250×121mm

Dimensions (mm)