



components



Applications

- **Wavelength Locking**
- **ITU Spectrum Emulation**

Description

The Micron Optics *picoWave*[®] Controller is designed to be used in conjunction with the Thermo Electric Cooler (TEC) equipped Micron Optics *picoWave* Fiber Fabry-Perot Interferometer (FFP-I), where temperature stability is critical for wavelength reference stability.

The *picoWave* controller utilizes a linear proportional integration (PI) control feedback loop to maintain the temperature on the TEC (via thermistor feedback) to within 0.01°C of the set value.

Front panel controls are:

- Manual or preset (factory-set) temperature control switch
- Actual thermistor temperature or desired (set) temperature display readout switch. As there is a slight time delay between the actual and set temperatures, this feature is desirable in dynamic tuning applications.

When a TEC equipped Fiber Fabry-Perot Interferometer or *picoWave* component is purchased with the *picoWave* Controller, Micron Optics will install the component inside the controller with FC/APC standard bulkhead fiber optic connectors at the customer's request.

Features

- **Stable temperature control**
- **Simple operation**

Specifications

Optical

Resonance Tuning Range	100 GHz
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Electrical

Line Voltage and Frequency	120 – 240 VAC, 50 - 60 Hz
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Thermistor Input	10K Ω NTC
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Feedback Circuit Time Constant	1 Second
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Mechanical

Operating Temperature	0° to 70° C
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Dimensions	70 x 153 x 158 mm
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Weight	1 kg
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General

Temperature Controls	Factory Preset or Manual Control
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Readout Controls	Set or Actual Temperature
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Options

025 Internal Installation	Interferometer/picoWave installed inside the Controller
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