

# *picoWave*<sup>®</sup> Controller | *pW-C*

## Applications

- Wavelength Locking
- ITU Spectrum Emulation

## Features

- Controls FFP-I and *picoWave*<sup>®</sup> TEC based components
- Stable temperature control
- Simple controls

## Description

The Micron Optics *picoWave*<sup>®</sup> Controller (*pW-C*) is designed to be used in conjunction with a Thermo Electric Cooler (TEC) equipped Fiber Fabry-Perot Interferometer (FFP-I). The *pW-C* allows for critical temperature control for wavelength reference stability.

The *picoWave*<sup>®</sup> Controller utilizes a linear proportional integration (PI) control feedback loop to maintain the temperature on the TEC (via thermistor feedback), 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. With a slight time delay between the actual and set temperatures, this feature is desirable in dynamic tuning applications.



## Specifications

*pW-C*

### Optical Properties

Resonance Tuning Range 100 GHz

### Electrical Properties

Line Voltage & Frequency 120 - 240 VAC, 50 - 60 Hz

Thermistor Input 10K  $\Omega$  Negative Temperature Coefficient

Feedback Circuit Time Constant 1 Second

### Mechanical Properties

Operating Temperature 0° to 70° C

Dimensions 70 mm x 153 mm x 158 mm

Weight 1 kg