Fiber Fabry-Perot Controller | FFP-C

Applications

- **Spectrum Scanning**
- **Wavelength Locking**

Description

The **Micron Optics FFP-C** controller is an electronic piezoelectric actuator driver and optical signal processor specially designed for the FFP Tunable Filter (TF or TF2) or Scanning Interferometer. **Micron Optics' FFP-C** can be used in several modes of operation.

- Manual DC Voltage Driver (bias control only)
- Manual DC + AC Voltage Driver (bias, amplitude and frequency controls)
- Automatic Wavelength Locking to Laser Input Source (via a closed phase lock loop)

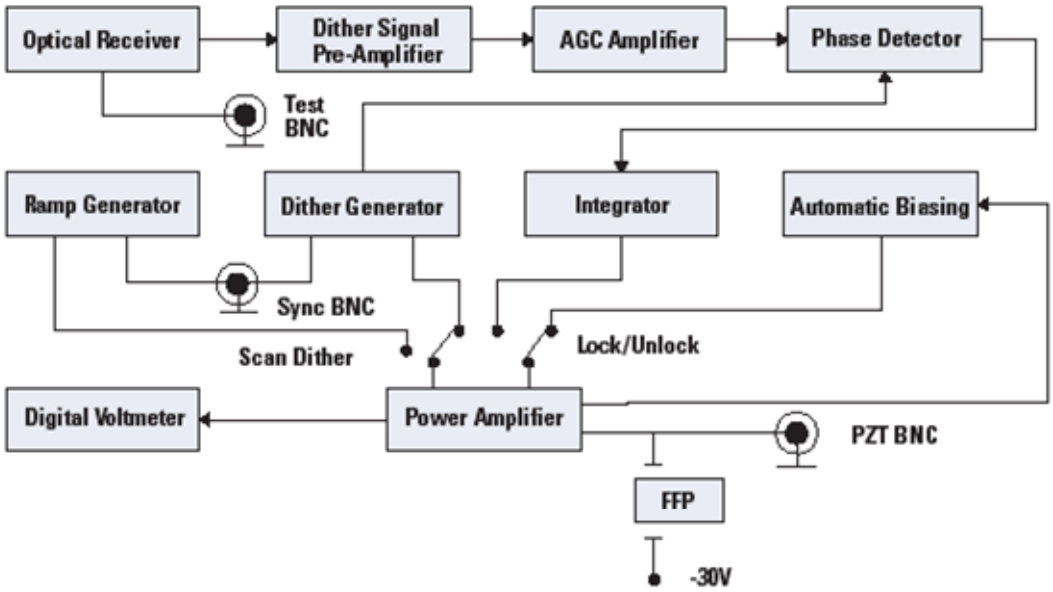
The **FFP-C** is an excellent tool for first time users of fiber Fabry-Perot filters to become familiar with filter technology and operations. It also can be used as a lab bench tool in the research of advanced capabilities of tunable filters.

Features

- **Scan or dither mode capability**
- **Scan mode > 50V (> 4 FSR range)**
- **Built-in photodetector with FC/APC input (other inputs available)**
- **Digital voltmeter for piezoelectric transducer monitoring**
- **Rear BNC outputs for oscilloscope monitoring**
- **Bias voltage control for any filter**
- **Automatic wavelength locking with filters of finesse values up to 750**

FFP-C | Fiber Fabry-Perot Controller

Figure 1



Specifications

Optical	
Input Power	-50 to -10 dBm
Input Connector	FC/SPC
Detector Wavelength Range - InGaAs	1000 – 1650 nm
Electrical	
Bias Tuning Voltage	5 – 55 V
Ramp Frequency	20 – 100 Hz
Ramp Amplitude	5 – 55 V
Dither Frequency	1.5 – 2.5 KHz
Dither Amplitude	8 – 12 mV
Power Supply, 15W	95 – 135 VAC
Auxiliary Input Impedence	10 kΩ
Auxiliary Input DC Voltage	Maximum 12 V
Auxiliary Dither Signal Amplitude	10 μV to 80 mV
Auxiliary Input	SMA
Mechanical	
Dimensions	211 x 87 x 242 mm
Weight	1.9 kg
Options	
020 – Power Supply, 220 V	190 – 265 VAC
060 – Equipped with FC/SPC Bulkhead Adapter	
062 – Equipped with SC/SPC Bulkhead Adapter	

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