

Tunable Filter Controller Development Kit



Description

Micron Optics' Tunable Filter Controller Development Kit is an electronic piezoelectric actuator driver specially designed for the FFP Tunable Filter (TF or TF2) or Scanning Interferometer. The Development Kit can be used in several modes of operation.

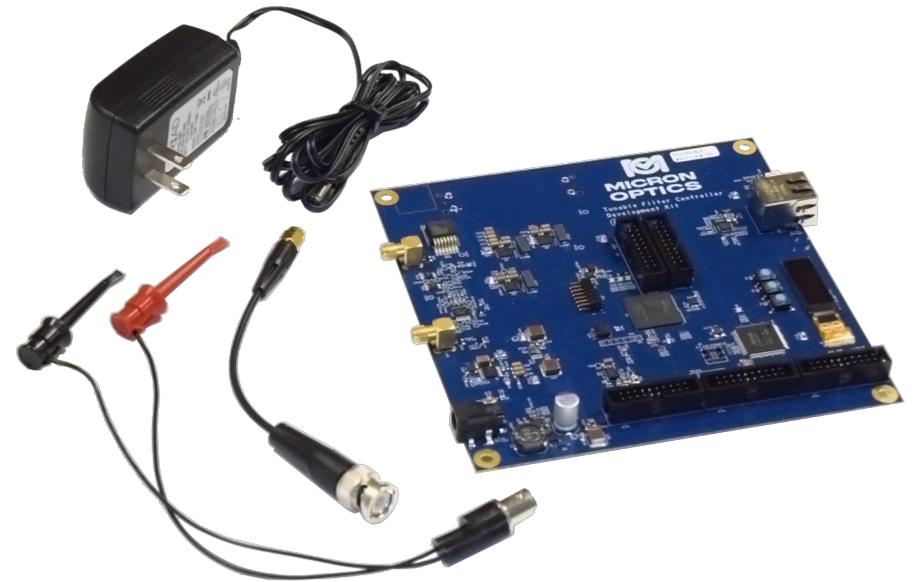
- ~60 V scan range
- DC + AC Voltage Driver (bias, amplitude and frequency controls)
- Capable of being controlled via onboard interface
- Lview and Python APIs
- Simple UI to control input signal, frequency, and applied voltage

Fastest way to test FFP
Tunable Filters with an
easy to use interface

The Tunable Filter Controller Development Kit 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.

Key Features

- High Voltage PZT driver
- APIs and Windows Application
- Onboard controls
- Low noise
- High degree of linearity
- Small form factor



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Properties

Tunable Filter Development Kit

Waveform	Symmetric Triangle
Drive Output	~ 0.5 – 57.5 V
DC Offset	~ 0.5 – 30.5 V
AC Amplitude ¹	~ 0 – 57 V
Scan Rate	1, 10, 100, 1000 Hz (selectable)
Drive Noise	< 1 mV _{rms}
Drive Linearity ²	< 1% at scan rates <= 100 Hz, < 5% at 1 kHz
Trigger	3.3 V, 100 Ω load
Trigger Rising Edge	Start of increasing voltage ramp, End of decreasing voltage ramp
Trigger Falling Edge	End of increasing voltage ramp, Start of decreasing voltage ramp
Power Supply	100 - 240 VAC input, 18 VDC output (included)
Drive, Sync/Trigger Connector Type	SMA
Communication	Ethernet

Notes

1 Amplitude range is reduced to ~38 V at 1 kHz scan rate

2 Over 90% of scan range