The FST-001-B is a piezo-driven fiber stretcher with a long optical delay range of up to 3 mm. The device comes complete with a piezo driver packaged in a user-friendly small enclosure. Only +12 VDC is required to power the unit. One attractive feature is that the device is controlled by up to four independent PZTs, so that the user has the option to drive each PZT individually, for high resolution, or collectively, for large stroke. In addition, each PZT can be controlled either with an analog signal or a 12-bit TTL signal. During analog control, the driving circuit simply acts as a 4-channel voltage amplifier with 30V/V amplification. Alternatively, the output voltage can be controlled by a computer equipped with a digital I/O card, or by a microprocessor. The FST-001-B enables applications from sensing to medical imaging, interferometry, and spectrum analysis. At General Photonics, we stretch the fiber hard to make your work more relaxed.

### Specifications:

- **Optical Path Delay Range**: > 3 mm (in air)
- **Phase Change Sensitivity**: 810 m/V at 1550nm, (analog input, using 4 channels)
- **Internal Voltage Amplification**: 30 V/V
- **Max. Voltage On PZT**: 140 volts
- **Resonance Frequency**: 2.2 ± 0.3 kHz
- **Insertion Loss**: < 0.2 dB
- **Insertion Loss Variation**: < 0.1 dB
- **Return Loss**: > 65 dB
- **PDL**: < 0.05 dB
- **Fiber Type**: SMF-28 standard, others available by request
- **Wavelength Range**: 1260 to 1620 nm
- **Maximum Optical Power**: 1000 mW min.
- **Analog Input**: 4 channels, 4.7 volts max. for each channel
- **Digital Input**: 20-pin digital connector to accept 12 bit TTL control signal.
- **Software**: None
- **Operation Temperature**: 0 to 50 °C
- **Storage Temperature**: -40 to 80 °C
- **Dimensions**: 170 (L) × 106 (W) × 38.6 (H) mm

### Features:

- Large Delay Range
- High Speed
- Low Insertion Loss
- Analog and Digital Control
- User Friendly

### Applications:

- Sensors
- Interferometers
- Medical Imaging
- Spectrum Analysis
- OCT

### Tech Info:

- Optical Coherence Tomography Technologies