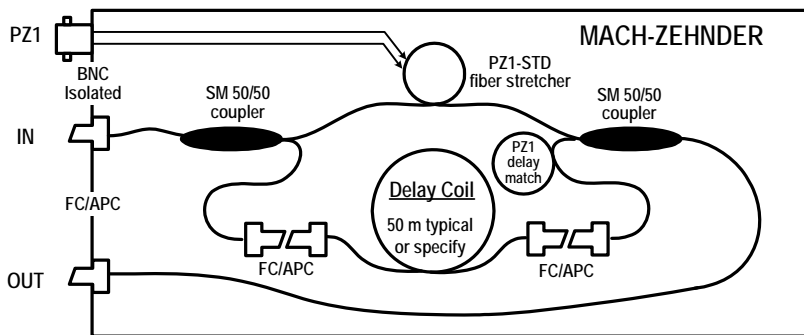
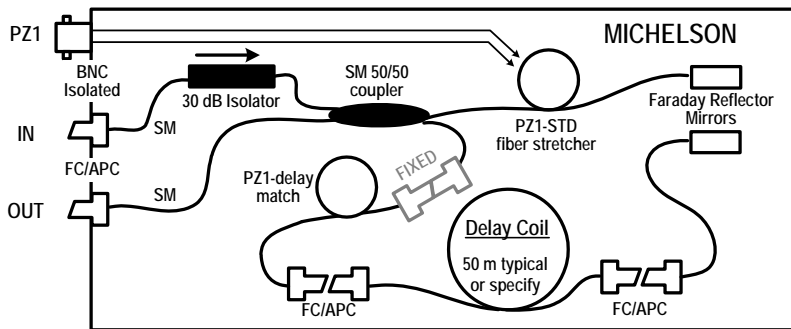


- Laser phase noise testing
- Laser frequency noise testing
- Physical sensing

*OPTIPHASE®*, a leading supplier of ultra-high performance interferometric systems, offers **Fiber Interferometers** for use in precision test and measurement instrumentation as well as fiber sensing systems. These interferometers are driven by our own PZ1 Low-profile Fiber Stretcher with enhanced modulation, through a front panel BNC connector. Michelson and Mach-Zehnder interferometers are available in wavelengths from 1064 to 1550 nm. Each interferometer has a “zero meter” path mismatch which provides flexibility to change the delay length to match varying test applications. The standard length shipped is 50 meters. We also build custom interferometers. Contact us and let us know of your specific requirements.

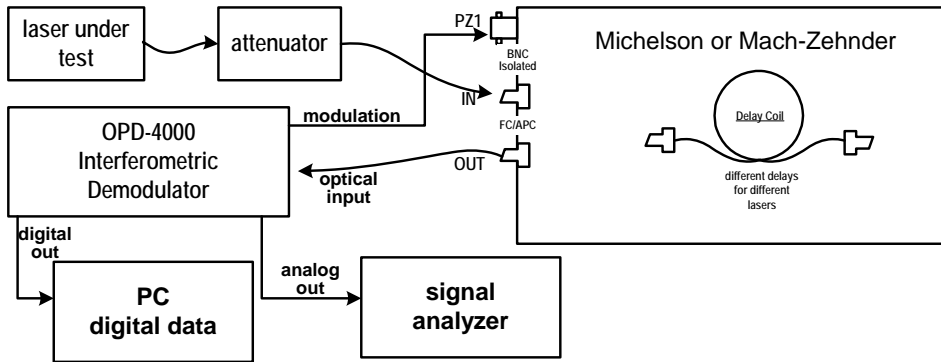


Preliminary

## Specifications

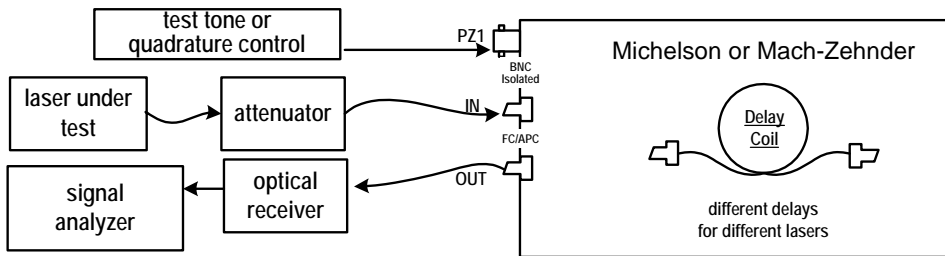
INTERFEROMETER	MICHELSON			MACH - ZEHNDER		
Model Number	MFI-10-50	MFI-13-50	MFI-15-50	MZI-10-50	MZI-13-50	MZI-15-50
Operating Wavelength	1064 nm	1310 nm	1550 nm	1064 nm	1310 nm	1550 nm
Modulator Constant	2.5 rad/V	2.0 rad/V	1.6 rad/V	1.2 rad/V	1.0 rad/V	0.8 rad/V
Path Mismatch [without delay]	Zero meter +/- 10 cm			Zero meter +/- 10 cm		
Modulator Interface	BNC			BNC		
Fiber Type	SMF28e			SMF28e		
Optical Interface	FC/APC			FC/APC		
Dimensions & Weight	10.2"L X 6.3"W X 3.5"H; 6 lbs.			10.2"L X 6.3"W X 3.5"H; 6 lbs.		
Delay Coil						
Delay length range	0.5 meters to 1,000 meters			0.5 meters to 1,000 meters		
Standard length	50 meters			50 meters		
Fiber Type	SMF28e			SMF28e		
Connectors	FC/APC			FC/APC		
Optional delay coils	Substitute "50" in the model number with desired length in meters					

## LASER PHASE / FREQUENCY NOISE TESTING



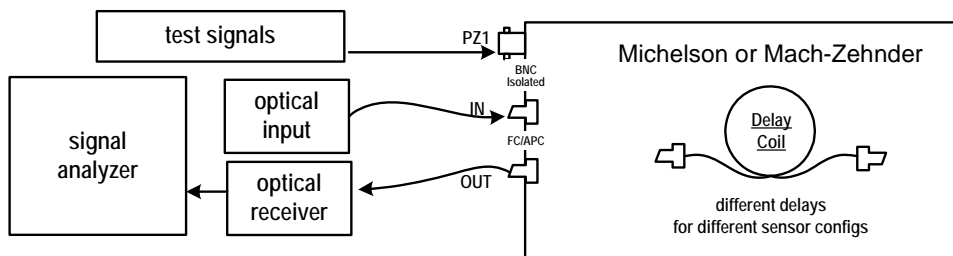
Laser under test is input to interferometer, which is set to the appropriate optical path mismatch by selection of the delay line which may be user installed or changed. OPD-4000 modulation output is applied to the PZ1 fiber stretcher input. OPD-4000 phase measurement output is selected as either digital or analog. Digital data is post processed. Analog data is made available to signal analyzer.

## LASER PHASE / FREQUENCY NOISE TESTING 2



Laser under test is input to interferometer, which is set to the appropriate optical path mismatch by selection of the delay line which may be user installed or changed. Voltage control is applied to the PZ1 fiber stretcher input to maintain quadrature bias. Output optical signal is applied to an optical receiver. Receiver output to a signal analyzer or digitizer / recorder.

## FIBER INTERFEROMETRIC SENSOR SIMULATOR



Optical input applied to represent the optical source of a fiber interferometric sensor. Delay coil is selected to be length of sensor to be simulated. Test signals applied to the PZ1 fiber stretcher. Output optical signal is applied to an optical receiver. Receiver output to a signal analyzer or digitizer / recorder.