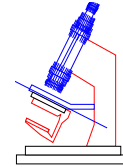


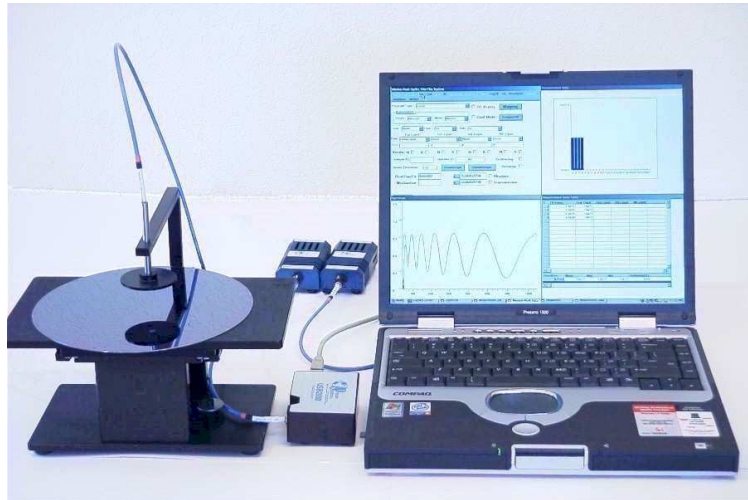
Mission Peak Optics Inc.



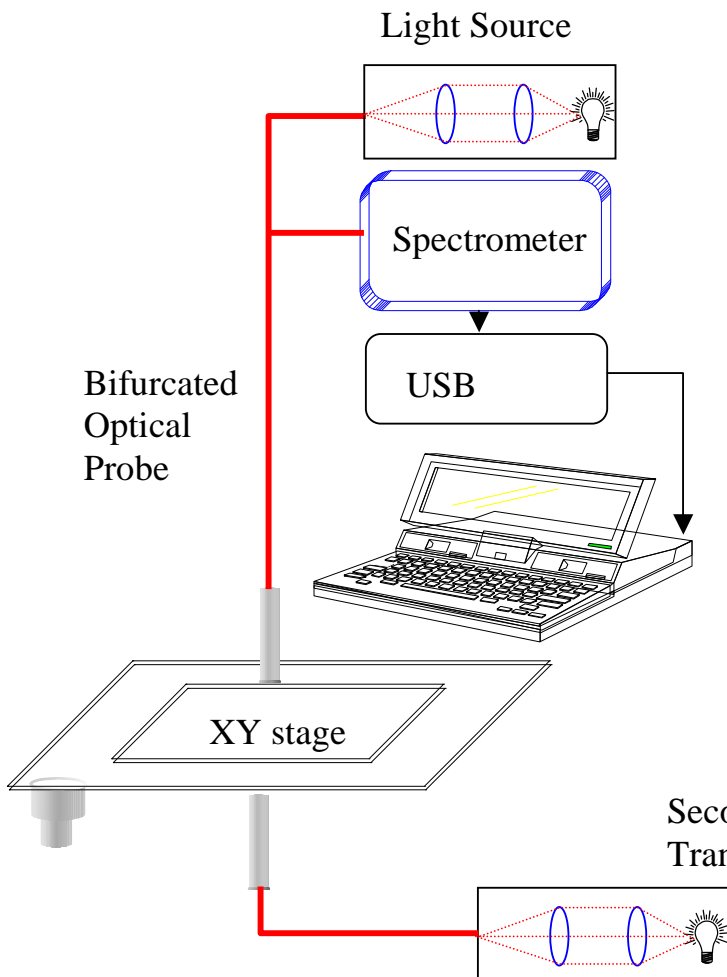
## Portable Thin Film Measurement System MP100-ST

Easy to use + Low Cost + Compact Size + Flexibility = High Performance

The **MP100-ST** system comes standard with a portable spectrometer, optical probe mounted on a manual X, Y stage, a secondary transmission light source, and a laptop computer pre-loaded with MPO software. This software contains hundreds of pre-loaded film recipes with the ability to create and edit new ones. The **MP100-ST** can measure Oxide, Nitride, Photoresist, Polysilicon, CIE chromaticity, cell gap, color filter thickness, as well as Polyimide/ITO. The portability of this compact system allows you to put the probe into the Measurement site.



### MP100-ST Portable Thin Film Measurement



The **MP100-ST** probe can be dismantled from the stage and hand held to access hard to reach areas. Applications include surface reflectivity of a material, textile color of a material, liquid concentration, and material inspection all with real-time spectral analysis. The probe can be configured for a working distance up to 6 inches with a varying measurement spot size.

The **MP100-ST** positioning mechanism is set by a X, Y stage. Allowing you to quickly locate the sample position. When the selected sampling position has been reached, measurements can be taken precisely and accurately without the X, Y stage drifting.

There is an add-on option for a programmable X, Y stage from 4 to 12 inches of travel.

With the Transmission option, the system can perform a Dual Mode measurement to obtain the precise N, K data.

### Second Light Source with Transmission Mode

# Specifications (MP100-ST):

Scanning range: 365 nm to 1000 nm, standard  
 Optional range: It is optional to choose different gratings for different ranges of scanning, such as: 200-575, 250-800, 530-1000, and 200-450. The combination of the ranges can add up from 200 nm to 1000 nm.

Spectrum resolution: 2 nm  
 Precision: 0.1 nm  
 Measuring speed: 3 second

## Measurement specification:

		1st Layer		2nd Layer		3rd Layer		4th Layer	
Film Type	Objective	Range	1 $\sigma$	Range	1 $\sigma$	Range	1 $\sigma$	Range	1 $\sigma$
P1/P2/ITO/SiO2/Glass	Probe	100 - 3,000 Å	3Å	100-3000 Å	3Å	100-1500 Å	3Å	100-1500 Å	3Å
Oxide/Si	Probe	200 - 30,000 Å	2Å						
		30,000 - 50,000 Å	5Å						
		50,000 - 100,000 Å	20Å						
Nitride/Si	Probe	150 - 20,000 Å	2Å						
Photoresist/Si	Probe	500 - 20,000 Å	5Å						
Nitride/Oxide/Si	Probe	150 - 20,000 Å	5Å	150-20,000Å	5Å				
Poly/Oxide/Si	Probe	100 - 5,000 Å	5Å	0-10,000Å	5Å				
Oxide/Poly/Oxide/Si	Probe	100 - 10,000 Å	5Å	0-10,000Å	5Å	100-10,000 Å	5Å		
Oxide/Al	Probe	2,000 - 20,000 Å	5Å						
Photoresist/Cr	Probe	500 - 20,000 Å	5Å						
Oxide/NiFe	Probe	2,000 - 20,000 Å	5Å						
Photoresist/Glass	Probe	500 - 20,000 Å	5Å						
ITO/Oxide/Glass	Probe	100 - 3,000 Å	2Å	100-2,000Å	2Å				
Very Thick film	Probe	1000 - 500,000 Å	100Å						
Customized film types are available for your applications.									

Measuring spot size: 1 to 3 mm diameter

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