MProbe VisHC

Thin Film Measurement System

It is easy to be an expert with MProbe

Measurements of thin films on curved samples that are large, difficult to place on sample holder or to move (e.g. assemblies) require special probes. MP-FLVis manual probe has a soft rubber padding and can be placed directly on the product. It is connected to a measurement unit with fiberoptics cable.

MProbeHC system

Backside Reflection

MP-FLVis probe can be used in applications where film is deposited on relatively thin transparent substrate and there is a need to eliminate the backside reflection. Examples of such applications are hardcoat on eye-glass lenses, hardcoat or anti-fog coat on head/rear automotive lights (covers and lenses).

Ease of Use

One-click measurement and analysis. Automatic adjustment of integration time. Powerful software tools that correct and optimize measured data.

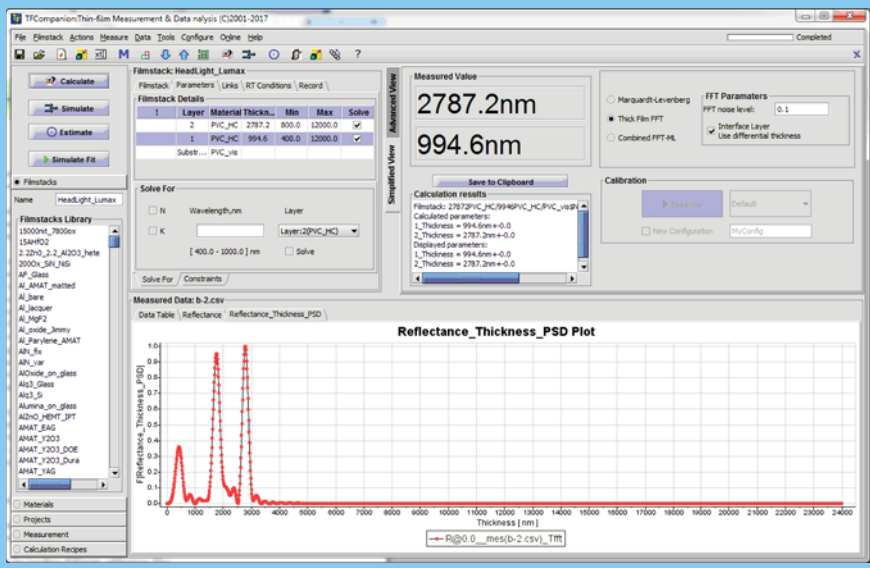
Thickness and n&k measurement

Thickness and optical constants can be measured simultaneously (typically in R&D during process development)

Precision	0.01nm or 0.01%
Accuracy	0.2% or 1 nm
Stability	0.02nm or 0.03%
Spot Size	0.2mm or 0.4mm (depending on fiber)
Sample Size	> 20mm
Thickness range	50nm -70 μm

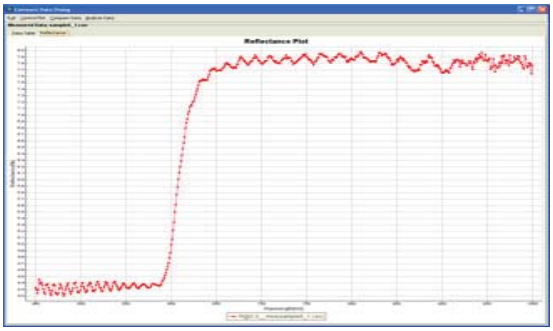
MProbe Advantage

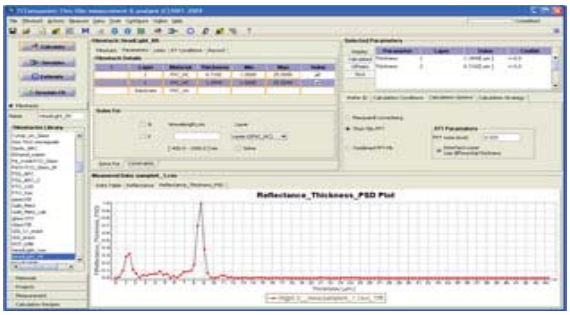
- One-click measurement/result
- Standalone software included
- Remote diagnostics
- Measurement history for recall and display (plots and statistics)
- Compare and evaluate multiple reflectance spectra
- Long life (10000+ hrs) light source
- Free software update for 12 months
- USB2 or LAN connectivity



Hardcoat measurement. HC and primer thicknesses are determined

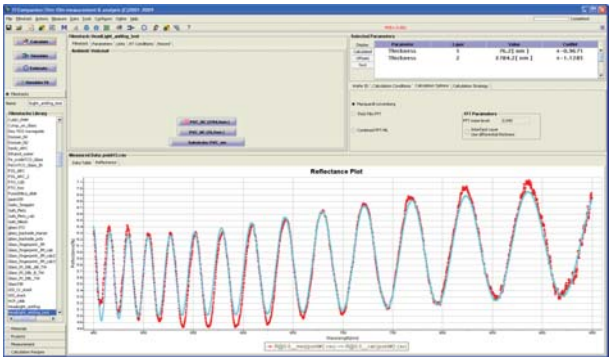
Specification





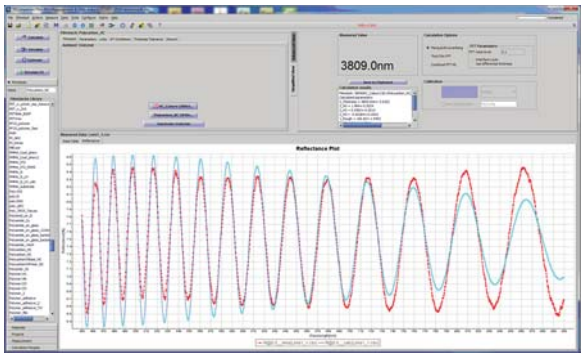
Measurement of HC on rear-light (red) covers

Spectral range (nm)	400-1000
Spectrometer/detector	F3 spectrometer, 2048 pixels Si CMOS, 16 bit ADC, 400-1000 nm range
Spectral resolution	<1 nm
Light source	5 W Tungsten-halogen lamp (Xe filled), CT 2800° Lifetime: 10000 hrs
Reflectance probe	Fiberoptics (7 fibers assembly), 400µm fiber core
Precision	<0.01 nm or 0.01%
Accuracy	<1nm or 0.2%
Weight (main unit)	5 kg
Size (main unit)	8”x 12” x 4” (WxDxH)
Power	100-250VAC, 50/60 Hz 20W

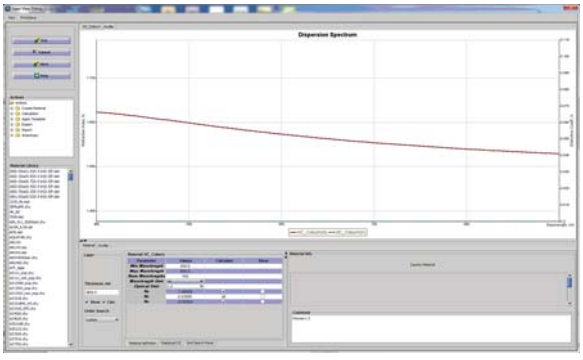


Measurement of anti-fog coating on lens

Hardware options	
- FO200	Using 200µm fiberoptics probe (for 0.2mm spot size)
- 2oW	Change to 20W (CT 3100°, lifetime 2000hrs) tungsten-halogen lamp.



Measurement of HC coating T and R.I. on eyeglass lens



Measured R.I. of HC coating on eyeglass lens

SEMICONSOFT, INC
83 Pine Hill Rd.
Southborough, MA 01772
Tel:(617) 388-6832
email: info@semiconsoft.com
http://www.semiconsoft.com

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