

Q-Sense Ellipsometry Module 401



● In many situations it is desirable to use multiple techniques to characterize molecular events on surfaces. The Q-Sense Ellipsometry Module enables simultaneous QCM-D and ellipsometric measurements on the same substrate.

Please note the following:

DIMENSIONS: The module, together with the E1 chamber, has fixed dimensions and thus requires a specific amount of space on the ellipsometer stage. All dimensions are available in a separate PDF.

DESIGN: QELM 401 has a fixed angle of incidence; 65 degrees. The hole for the laser beam from the ellipsometer to the sensor is 2.5 mm in diameter. Please note that the QELM 401 requires a pump with 3 or more channels since there are three outlets to get a good flow profile.

OPTICAL CHARACTERIZATION OF SENSORS: Sensors supplied by Q-Sense do not necessarily have the same optical response from sensor to sensor. Therefore, it is recommendable to individually measure the optical properties of each sensor. An example of characterization of QSX 301 (Gold) and QSX 335 (SiO₂ with thicker opaque Titanium layer) is available in a separate technical note. ● ● ●

● SPECIFICATIONS: QELM 401

Sensor crystals	QSX 301 (Gold) and QSX 335 (SiO ₂ with thick Ti adhesion layer). Others QSX sensors can be used but may be difficult to optically characterize.
Internal volume	100 µl (above the sensor crystal)
Type of measurements	Flow or stagnant liquid measurements
Pump requirement	3 or more channel pump, e.g. Ismatec IPC N4
Materials exposed to liquid	Viton® (O-rings), Teflon® and Titanium
Cleaning	All parts may be disassembled for separate cleaning
Angle of incidence	65 degrees
Glass	Diameter 5 mm, thickness 2 mm
Dimensions	Height: 44 mm Width: 53 mm Depth: 63 mm
Dimensions in E1 chamber	See separate PDF

Specifications subject to change without notice

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