

Simple yet Sophisticated

Designed for reliable, affordable thin film monitoring, Mesa[™] is an instrument capable of monitoring processes up to 500°C (e.g., ALD, CVD, etc.).

The minimalistic engineering constituting the Mesa[™] is the culmination of multiple generations and iterations of head design. Mesa[™] is ideal for manufacturers who require a straight-forward thin film monitoring sensor.

When combined with Colnatec Eon-LT™ monitor or Eon-ID controller, Mesa™ provides real-time correction and accuracy up to .001 Hz.

Mesa[™] is optimized for use with Colnatec RC[™] crystals that are uniquely immune to radiation spikes and film stress caused by shutter openings, film condensation, and source radiation.

Featuring real-time control of process and/or reactor conditions, Mesa[™] reduces ex-situ metrology sampling and scrapped runs.

Mesa[™] provides greater accuracy in film deposition, leading to increased process yield and improved film quality. The high temperature rating of the sensor makes it ideal for ALD systems.

MESATM THIN FILM THICKNESS SENSOR

CALLER CONTRACTOR

Features

- Designed for 14 mm diameter crystals, up to 10 MHz operation
- Available with 2.75 Conflat[™] or 1" bolt feed through as stock configuration. Length 30" (75 mm). Custom sizes, flanges, and bends available. Also available with compression fittings to allow infinite length adjustability.
- Standard SMA air side connection for crystal measurement. Ideally used with the Eon-ID™ controller and Eon-LT™ monitor, but compatible with other film thickness monitors and controllers

Applications

- Atomic Layer Deposition (ALD)
- Chemical Vapor Deposition (CVD)
- Molecular Beam Epitaxy (MBE)
- CIGS (thin film solar)
- OLED (display & lighting)
- Multi-Layer Optical Thin Film
 Deposition



Specifications

Measurement	
Frequency Resolution	0.001 HZ @ 6 MHz (1 Sample per Second)
Sample Rate	0.5 Hz to 100 Hz
Display Update Rate	0.5 Hz to 100 Hz (Depending on sampling rate)
Sensor Crystal Frequency	5,6,7,8,9,10 MHz
Dimensions	
Length	4" to 30" depending on customer requirements
Cross Section	Able to be passed through a 2.75" ConFlat port
Ordering Information	
Mesa [™]	Standard thin film sensor