



## **Quartz Crystals**

Quality, reliability, affordability.

# GET THE HIGH QUALITY INFICON CRYSTALS YOU WANT, WHEN YOU WANT THEM. AT AN AFFORDABLE PRICE.

**INFICON quartz crystals** meet all your requirements for reliability, availability and affordability. From raw quartz to finished monitor crystal, no one else can promise complete quality control. Because, now, the major supplier of blank quartz crystals is part of INFICON.

#### 100% TESTING AND INSPECTION

To ensure maximum lifetime in your process and stable and accurate rate control, each crystal is examined for:

- Resistance—Resistance is checked to assure measurement stability and longer coating life. Resistance is an indicator of electrical contact and electrode adhesion.
- Frequency—Starting frequency within a small specification range is verified to ensure accurate thickness measurement.
- Curvature—An electrical test for curvature is performed to assure resonance stability. Poor curvature results in measurement stability degrading more rapidly.
- Visual Conformity—Each crystal is inspected for electrode uniformity, surface flaws, and other imperfections that are indicators of poor electrode adhesion and contamination.

#### **DELIVERING JUST THE RIGHT CRYSTAL**

Available in 5 and 6 MHz with silver, gold, or stress-reducing alloy electrodes, INFICON quartz crystals are produced to stringent specifications and carefully inspected to assure high yields and optimum reliability. Our AT-cut plano-convex design reduces errors in deposition rate and thickness by minimizing spurious vibrational modes (or mode hopping). And you now have a choice of sizes: Sloan-style or INFICON standard. Plus a high-level of available inventory to meet both your immediate and long-term requirements. We also offer the flexibility to produce crystals to your specific sizes and frequencies.

#### CHOOSING THE RIGHT CRYSTAL

Our continuing research into quartz crystal characteristics results in ongoing improvements to offer the highest reliability in your process. We recommend gold crystals for most applications. However, silver crystals will provide superior performance in processes with high heat loads, such as sputtering. They may also improve the deposition of oxides. And alloy crystals are recommended for optical coating with dielectric materials and for semiconductor processes with high-stress materials.



INFICON quartz crystals are available in alloy, gold and silver

#### THREE CONVENIENT PACKAGES

- Clean-room compatible dispenser—holds 10 crystals which can be dispensed directly into the sensor holder or with the tool provided.
- Flat-pack carousel dispenser—holds 10 crystals which are extracted by vacuum pencil or dispensed directly into the holder.
- Compact box—holds 10 crystals which are extracted by vacuum pencil or tweezers.

### A COMPLETE LINE OF THIN FILM CONTROL INSTRUMENTS

However simple or complex your system—whether it involves thermal evaporation, sputtering or ion beam processes—INFICON makes a complete line of controllers, monitors, sensors and feedthroughs to meet your needs.

ORDERING INFORMATION	
Description	Part Number
6 MHz Gold, in clean-room compatible dispenser	
6 MHz Silver, in clean-room compatible dispenser	008-009-G10
6 MHz Alloy, in clean-room compatible dispenser	750-679-G1
6 MHz Gold, in flat-pack carousel dispenser	750-1000-G10
6 MHz Silver, in flat-pack carousel dispenser	750-1001-G10
6 MHz Alloy, in flat-pack carousel dispenser	750-1002-G10
6 MHz Gold, in compact box	SPC-1093-G10
6 MHz Silver, in compact box	750-1014-G10
6 MHz Alloy, in compact box	750-1015-G10
5 MHz Gold, in clean-room compatible dispenser	750-225-G2
5 MHz Silver, in clean-room compatible dispenser	750-226-G2
5 MHz Alloy, in clean-room compatible dispenser	750-678-G1
5 MHz Gold, in flat-pack carousel dispenser	750-1005-G10
5 MHz Silver, in flat-pack carousel dispenser	750-1006-G10
5 MHz Alloy, in flat-pack carousel dispenser	750-1007-G10
5 MHz Gold, in compact box	750-1016-G10
5 MHz Silver, in compact box	750-1017-G10
5 MHz Alloy, in compact box	750-1018-G10

