

# Quartz Crystals

Superior Sensibility



## Optimize Process Efficiency and Consumable Inventory

**INFICON quartz crystals minimize process interruption and consumable cost. Each crystal is tested and inspected to ensure the most consistent and highest quality crystal with maximum crystal life. INFICON works with you to optimize inventory management with flexible delivery schedules. We offer a stable supply of a critical component as the world leader in thin film solutions.**

### DELIVERING JUST THE RIGHT CRYSTAL

INFICON offers vacuum deposition crystals in different crystal diameters, frequencies, electrode patterns, electrode coatings, and packaging options to meet the unique needs of each customer. In addition, INFICON

### ADVANTAGES

- Minimize cost of consumables with the most consistent and highest quality crystals
- Increase profitability and maximize continuous process runs with increased production time
- Optimize inventory management with flexible delivery schedules and in-stock products
- Stable supply from an ISO-certified company
- Maximize process performance and gain customized solutions with worldwide applications support
- Rapid troubleshooting of process variances with expert support

manufactures specialty crystals that are application-specific, such as crystals customized for ALD depositions. For more information on all the variations of crystals and their purposes, refer to the application note, Guide to INFICON Quartz Monitor Crystals, available on the website at: <https://goo.gl/UEHuXY>

### 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. Alloy crystals are recommended for optical coating with dielectric materials and for semiconductor processes with high-stress materials.

### FOUR CONVENIENT PACKAGES

- Cleanroom compatible dispenser—holds 10 crystals which can be dispensed directly into the sensor holder, with Teflon® tweezers, or with the tool provided.
- Flatpack carousel dispenser—holds 10 crystals which are extracted by vacuum pencil, with Teflon tweezers, or dispensed directly into the holder. Flat Pack Carousel packages are easy to store and stack.
- Compact box—holds 10 INFICON crystals, provides easy storage and consumes the least amount of shelf space.

Crystals are dispensed using plastic tweezers or a vacuum pencil. Crystals are separated from each other by inert, low-friction paper, and are cushioned with foam pads.

- 50-Pack—holds 50 INFICON crystals in a clear rectangular plastic package. This package is convenient for high volume production. The 50-Pack package is easy to store and stack. Crystals are dispensed using a vacuum pencil.

## 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, allowing for deposition process optimization and enabling you to produce superior quality products.

## 100% TESTING AND INSPECTION

INFICON manufactures and inspects each crystal in a cleanroom to deliver the highest standards of quality assurance from raw quartz to the final packaged products ready for shipment using the following criteria:

- Resistance: checked to assure measurement stability and longer coating life
- Curvature: assures resonance stability
- Frequency: before and after application of electrodes to ensure accurate thickness measurement
- Visual conformity: inspected for electrode uniformity, surface flaws, and other imperfections which might indicate poor adhesion or contamination

## SPECIFICATIONS

### 6 MHZ SENSOR CRYSTALS 14 MM (0.550 IN.) DIAMETER

Gold electrode, in clean room compatible dispenser of 10	008-010-G10
Gold electrode, in box of 10	SPC-1093-G10
Gold electrode, in flat pack carousel of 10	750-1000-G10
Gold electrode, in 50 piece flat pack	750-1051-G50
Silver electrode, in clean room compatible dispenser of 10	008-009-G10
Silver electrode, in box of 10	750-1014-G10
Silver electrode, in flat pack carousel of 10	750-1001-G10
Alloy electrode for high stress materials, in clean room compatible dispenser of 10	750-679-G1
Alloy electrode, in box of 10	750-1015-G10
Alloy electrode, in flat pack carousel of 10	750-1002-G10
Alloy electrode, in 50 piece flat pack	750-1053-G50
Gold electrode, THERMAL SHOCK, in clean room compatible dispenser of 10	SPC-1157-G10
Gold electrode, THERMAL SHOCK, in flat pack carousel of 10	SPC-1194-G10

### 5 MHZ SENSOR CRYSTALS 14 MM (0.550 IN.) DIAMETER

Gold electrode, in clean room compatible dispenser of 10	750-225-G2
Gold electrode, in box of 10	750-1016-G10
Gold electrode, in flat pack carousel of 10	750-1005-G10
Silver electrode, in clean room compatible dispenser of 10	750-226-G2
Silver electrode, in box of 10	750-1017-G10
Silver electrode, in flat pack carousel of 10	750-1006-G10
Alloy electrode, in clean room compatible dispenser of 10	750-678-G1
Alloy electrode, in box of 10	750-1018-G10
Alloy electrode, in flat pack carousel of 10	750-1007-G10

### 5 MHZ SENSOR CRYSTALS 12.4 MM (0.490 IN.) DIAMETER

Gold electrode, in clean room compatible dispenser of 10	750-1020-G10
Silver electrode, in clean room compatible dispenser of 10	750-1080-G10

NOTE: If the desired crystal is not shown, please contact INFICON at [reachus@inficon.com](mailto:reachus@inficon.com) to inquire about our many additional crystal offerings.



[www.inficon.com](http://www.inficon.com) [reachus@inficon.com](mailto:reachus@inficon.com)

Due to our continuing program of product improvements, specifications are subject to change without notice.  
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