

Quality Crystals®

In 6MHz and 5MHz in Gold, Stress-Relieving Alloy®, Longer Life Gold®, Silver and Advanced Adhesion Alloy®. The metal used for the contact electrode on the crystal has an effect on the crystal's ability to measure film thickness. Choose the best electrode for your coating process.



Fil-Tech		INFICON STYLE		FREQUENCY & P/N
Q18010	\$48	Gold		6MHz 008-010-G10
Q18012	48	Longer Life Gold		6MHz
Q18008	48	Stress Relieving Alloy		6MHz 750-769-G1
Q18014	48	Advanced Adhesion Alloy		6MHz
Q18009	48	Silver		6MHz 008-009-G10
Fil-Tech		BALZERS STYLE		
QB104G	\$55	Gold		5MHz B489-025-T
QB104GL	55	Longer Life Gold		5MHz
QB104A	55	Stress Relieving Alloy		5MHz
QB104S	55	Silver		5MHz BN845-104-T
Fil-Tech		SLOAN STYLE		
QS3952	\$52	Gold		5MHz 103952
QS3952GL	52	Longer Life Gold		5MHz
QS3954	52	Stress Relieving Alloy		5MHz
QS3950	52	Silver		5MHz 103950
Fil-Tech		INTELLEMETRICS STYLE		
Q18010F	\$48	Gold		6MHz SN66NG
Q18012F	48	Longer Life Gold		6MHz
Q18008F	48	Stress Relieving Alloy		6MHz
Q18009F	48	Silver		6MHz SN66NS



Liquid Plating Crystals

1" Diameter 5MHz polished, plano/plano crystals for measurements in gas or liquid

Fil-Tech		ELECTRODE		SRS		INFICON
QM1001	\$30 each	Cr/Au		0100RX1	\$395/10	149273-1 \$55 each
QM1003	35	Ti/Au		0100RX3	395/10	149257-1 51
QM1003-1	40	Ti/Ti		0100RX4	595/10	149274-1 64
QM1004	40	Ti/Pt				
QM1005	35	Ti/Al2O3				
QM1007	40	Cr/Au/Ni				
QM1008	30	Stress Relieving Alloy				
QM1010	40	Cr/Au/Mo				
QM1011	40	Ti/Mo				
QM1012	40	Cr/Au/Cu				
QM1013	40	Cr/Au/Zn				
QM1015	40	Cr/Au/SiO2				
QM1018	35	Cr/Au/Cr				

Fil-Tech Crystals Comparable to Q-SENSE

.550" Diameter 4.95MHz polished, plano/plano.

Fil-Tech		ELECTRODE		Q-SENSE
QXS0301	\$50 each	Au		QXS 301 \$295/5
QXS0303	50	SiO2		QXS 303 450/5
QXS0304	50	SS		QXS 304 N/A
QXS0309	50	Al		
QXS0310	50	Ti		

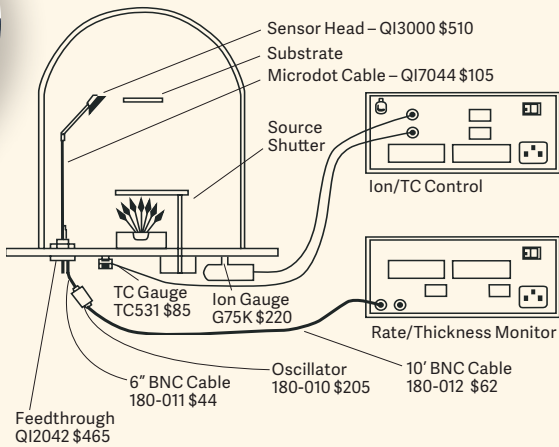
QCM-I Quartz Crystal Microbalance with Impedance Analysis



The QCM-I is a high sensitivity, mass sensing instrument that probes the interactions of molecules, polymers and biological assemblies with surfaces, label-free and in real time. The QCM-I can measure the hydrated mass and rigidity of nm to micron scale layers at the sensor curve, as well as fluid properties. The measurement uses impedance analysis of a quartz crystal sensor to determine the resonant frequency and bandwidth of the resonant conductance cure, fundamental and overtones. The QCM-I has 2-4 channel measurement with independent temperature and flow control on the channels. Fil-Tech crystals and external sensors are available for a range of applications.

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Typical System



Monitor/Controller Options

SQM-160	Rate/thickness monitor	\$2,090
STM-2	Deposition Monitor	787
XTC/3	Deposition Controller	4,710
SQC-310	Deposition Controller	3,390
IC6	Deposition Controller	13,150
CYGNUS 2	Deposition Controller	13,280

Components Required for a Complete System

180-010	Remote analog oscillator	\$205
180-011	6" BNC cable M/F	44
180-012	10' BNC cable M/M	62
Q13000	Sensor head single sensor	510
Q17044	30" Microdot cable	105
Q12042	Feedthrough 1" bolt	465
TC531	Thermocouple gauge	85
G75K	Ion gauge, 3/4" kovar, iridium	220

INFICON Multi-Film Rate/Thickness Monitors and Controllers

SHOP ONLINE NOW!

INFICON authorized distributor

Fil-Tech is an authorized distributor for INFICON® products. Choose your INFICON monitor or controller, or call 617-227-1133 with your application requests and for best pricing.



SQM-160 Multi-Film Rate/Thickness Monitor

Has 2 sensor inputs standard and 4 additional sensor inputs optional with 2 recorder outputs to provide analog rate and thickness signals. Sensor inputs can be assigned to different materials, averaged for accurate deposition, or configured for a dual sensor. Rate displays of 0.1Å/sec or 0.01Å/sec and frequency or mass display can be selected. Four relay outputs allow control of the source of sensor shutters, signal time and thickness setpoints, and signal crystal failure.

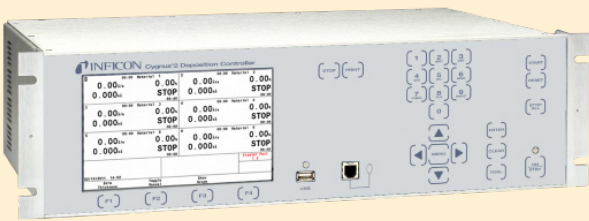
SQM160-S-2-R \$2,090



STM-2 USB Rate/Thickness Monitor

INFICON's STM-2 combines the simplicity of USB connectivity with the accuracy of a precision measurement engine in a compact, inexpensive package. Ten measurements are taken per second while achieving a resolution of 0.037 Å per measurement. The STM-2 comes with everything you need to connect your sensor/feedthrough to a Windows® PC. Simply connect the included BNC cable from the feedthrough to STM-2 and then connect the STM-2 to your PC using a standard mini-USB cable. STM-2 includes LabVIEW® software and Windows software for operation and data logging of up to eight STM-2s simultaneously.

STM-2 \$787



Cygnus® 2 Thin Film Deposition Controller

Provides exceptional value by combining the proven performance of INFICON thin film controllers with unique features, all designed for you to achieve the most from your OLED process. Cygnus 2 uses the ModelLock frequency measurement system to provide stable, high-resolution rate and thickness measurement with an industry leading rate resolution of .004..Å/s every 1/10 second.

CYG2-1101000 \$13,280



Zevision IMC300 Rate and Thickness Controller

INFICON's next-generation Zevision® IMC300 deposition controller offers new patented technology for today's optical coaters. The Zevision IMC300 maximizes reproducibility and uniformity with the highest thickness accuracy, the best measurement resolution, and the lowest rate noise using the ModelLock measurement system. The IMC300 maximizes the number of runs possible while lowering crystal consumable cost. Offered with Sequential Deposition and Codeposition.

IMC300-1001A00 \$4,270
IMC300-2001A00 POR



SQC-310 Thin Film Deposition & Codeposition Controller

Offers advanced electronics, improved display and an affordable price. Choose SQC-310 for sequential deposition or the SQC-310C for codeposition. SQC-310 comes standard RS-232 and USB, a "Quick Setup" menu, Windows® program, is accurate with ±0.03 Hz resolution at 10 reading/second and storage capacity for up to 100 processes, 1,000 layers and 50 films. Available in English or Chinese.

SQC310-2-R-1-C \$3,390
SQC310C-4-R-1-C \$6,120



IC6 Thin Film Deposition Controller

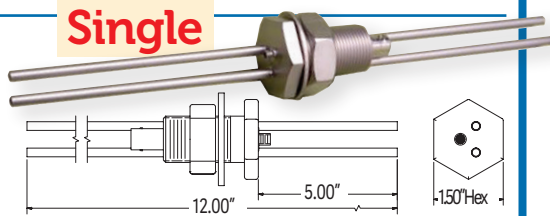
Provides exceptional value by combining the proven performance of INFICON thin film controllers with unique features, all designed to achieve the most from your deposition process. The IC6 uses the ModelLock frequency measurement system to provide stable, high-resolution rate and thickness measurement with an industry-leading rate resolution of 0.0043 Å/s every 1/10 second.

IC6-110100 \$13,150

FEEDTHROUGHS

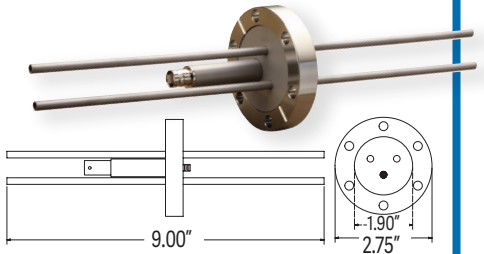
Single 1" Bolt QI2042

\$465
For Single
Sensors



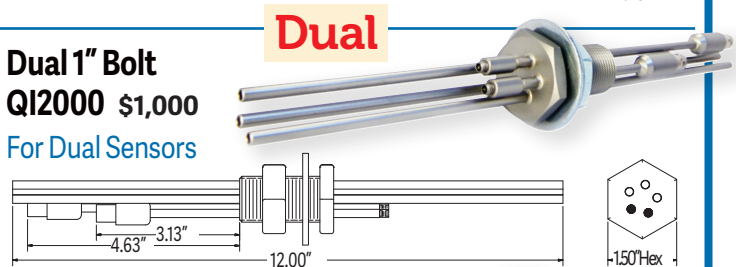
Single 2 3/4" Flange QI2043

\$535
For Single Sensors



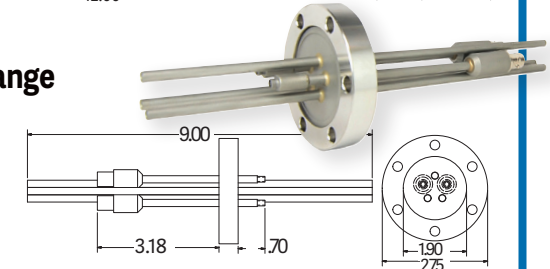
Dual 1" Bolt QI2000

\$1,000
For Dual Sensors



Dual 2 3/4" Flange QI2080

\$850
For Dual
Sensors



All feedthrough lines 3/16" OD steel tubing.
Custom feedthroughs available.

Sensor Head Parts, Oscillators and Cables

PART	INFICON	Fil-Tech
Ceramic Retainer	007-023	QI7023 \$103
Finger Spring	750-171-P1	QI0171 40
Crystal Holder	750-172-G1	QI0172 91
Crystal Holder	Fil-Tech Style	QI3010 80
Oscillator	783-500-013	180-010 240

CABLES	INFICON	Fil-Tech
Coaxial 30"	007-044	QI7044 \$126
Special Length		QI7044X 125
Right Angle		QI7045 105

Cables have an extra layer of Teflon to protect the shielded cable from deposition material, insuring longer life.

CABLES	PHelps	Fil-Tech
Unsheathed 8"	Pe16016	QP16016 \$110
Unsheathed 36"	Pe16018	QP16018 110
Unsheathed 48"	Pe16020	QP16020 110

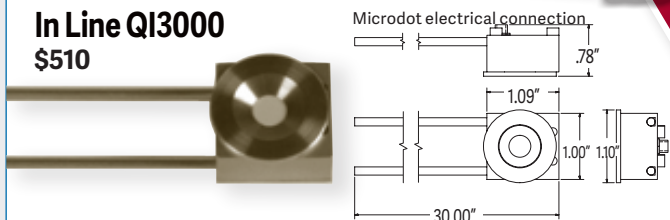
Cables have exposed metal sheath.

SENSOR HEADS

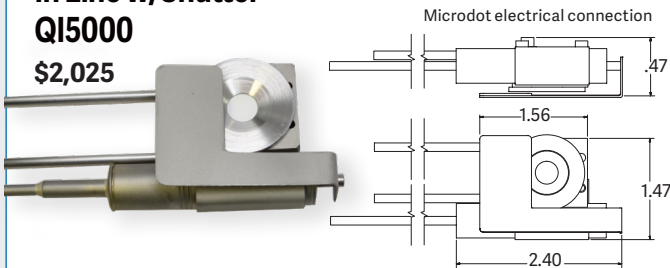
SHOP
ONLINE
NOW!

Single

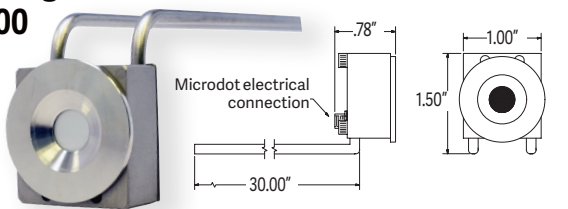
In Line QI3000 \$510



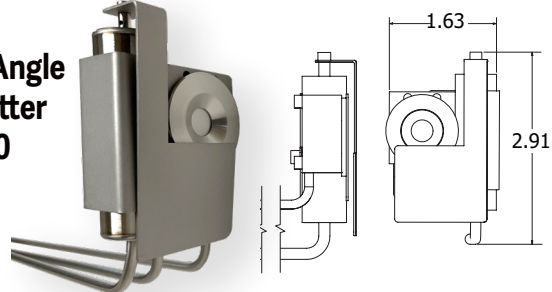
In Line w/Shutter QI5000 \$2,025



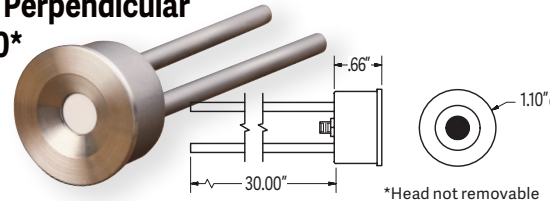
Right Angle QI4000 \$510



Right Angle w/Shutter QI4050 \$2,025



Round Perpendicular QI3500* \$635



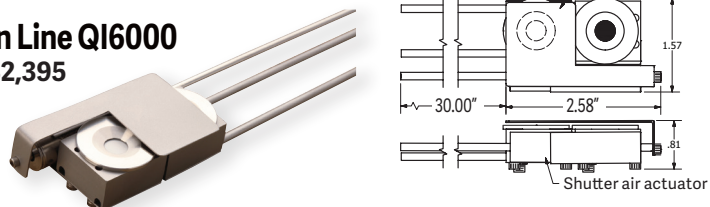
Custom sensor heads, feedthroughs and
assemblies available.

All sensor lines 1/8" OD stainless tubing except
QI3600 with 3/16".

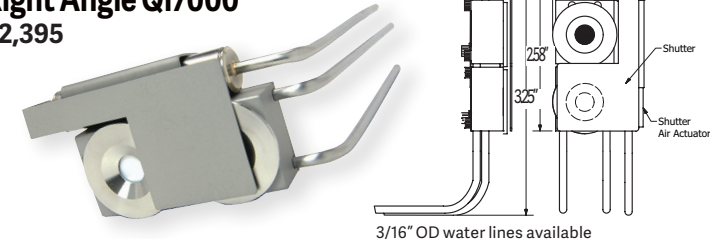
WELD FREE | NO WATER LEAKS | REMOVABLE FROM WATER LINES | SPECIAL ORDER SENSORS AVAILABLE

Dual with Shutter

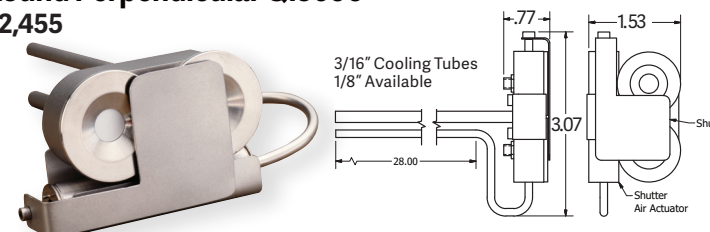
In Line QI6000 \$2,395



Right Angle QI7000 \$2,395

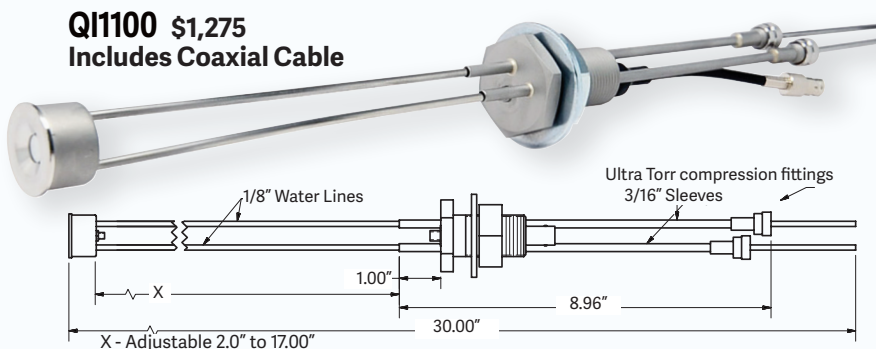


Round Perpendicular QI3600 \$2,455



Positional Sensor Heads

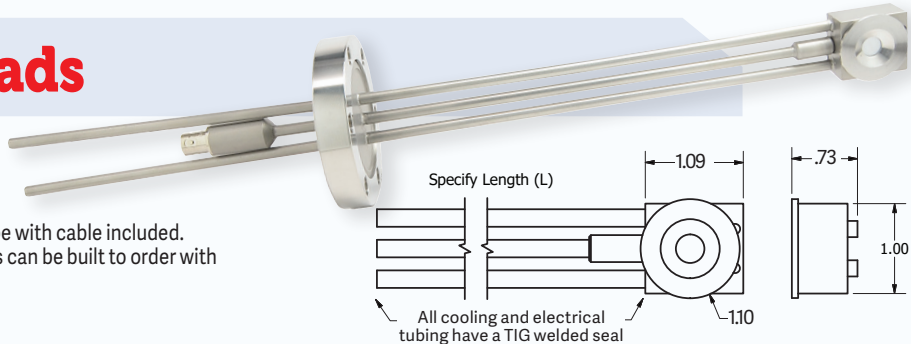
QI1100 \$1,275 Includes Coaxial Cable



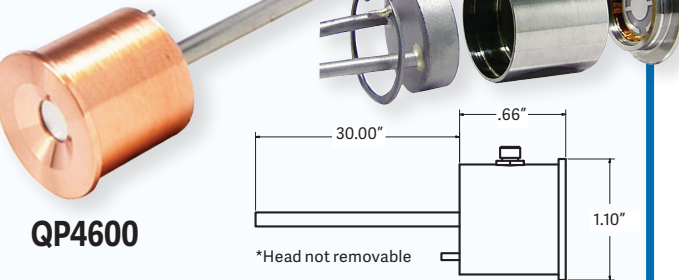
Bakeable Sensor Heads

Our Bakeable Sensor Heads are used for UHV and High Temp processes up to 300° C. The QI1200 is TIG welded to a rotatable conflat flange. A 1" baseplate bolt is available but the Viton O-ring will limit the temp to 205°C. The coaxial connection is sealed inside a rigid 3/16" OD stainless steel tube with cable included. Cooling tubes are 3/16" OD to maximize cooling. Sensor heads can be built to order with your choice of feedthrough type and length.

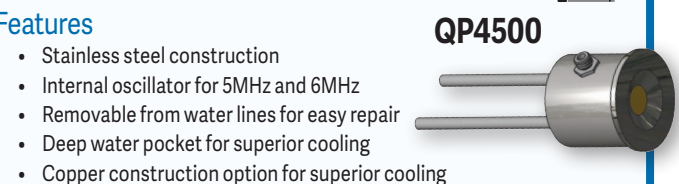
QI1200 \$1,300 Includes Coaxial Cable



Sensor Head With Internal Oscillator & Deep Water Pocket



QP4600



Sputter Head, SS	QP4500	\$660
Sputter Head Cap, SS	QP4501	85
Sputter Head, Copper	QP4600	725
Sputter Head Cap, Copper	QP4601	100

Specify crystal diameter for correct crystal holder style

QC12 Crystal Sensor System

Sensor head holds 12
crystals and allows
continuous monitoring
without process interruption

System Includes

- 2 Multi-crystal sensor heads
- 2 1" bolt or 2 3/4" flange feedthroughs
- Controller
- Vacuum, air and cooling cables
- 12 Complimentary Quality Crystals

The QC12 is precise and reliable and features a small footprint
with easy installation and reload. Compatible with INFICON,
Sigma, Maxtek and Sycon monitors.

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