



# SQC-310 Series

## Thin Film Deposition Controllers

HIGHLY ACCURATE SEQUENTIAL  
OR CODEPOSITION CONTROL

### THE MOST AFFORDABLE, ADVANCED MULTI-LAYER CONTROLLER—FROM THE TECHNOLOGY LEADER

The INFICON SQC-310 series offers features not found in any competitors' thin film controllers.

In addition to advanced electronics, an improved display, and an affordable price, SQC-310 is flexible in its configuration to meet the demands of any application.

For sequential deposition, SQC-310 features two sensor inputs, two source outputs, eight digital inputs, and eight relay outputs. The optional expansion card doubles the available inputs and outputs. For codeposition, SQC-310C can monitor and control up to four sensor inputs and four source outputs simultaneously. SQC-310C also has available 16 digital inputs, and 16 relay outputs.

#### WORLDWIDE SUPPORT: OUR EXPERTISE IS YOUR COMPETITIVE ADVANTAGE

INFICON is the only manufacturer of thin film deposition controllers with local service and technical support around the world—including a broad selection of sensors, feedthroughs, and accessories to complement the SQC-310 series controllers. When you purchase your SQC-310 series controller—or any other INFICON product—you can be assured of fast answers, attentive service, and maximum uptime.

#### FEATURES AT A GLANCE

- Bright, color LCD display—available in English or Chinese.
- Standard RS-232 and USB (RS-232 and Ethernet optional).
- Easy setup and operation with a “Quick Setup” Menu, six context-sensitive push buttons, and convenient parameter setting knob.
- Windows® program for developing, testing, and downloading processes, and for logging instrument data to your computer for process analysis and quality control.
- Accurate process control, especially for low deposition rates, with  $\pm 0.03$  Hz resolution at 10 readings/second.
- Storage capacity for up to 100 processes, 1,000 layers, 50 films.
- Monitoring of source material with a single sensor or with multiple sensors to provide accurate source distribution monitoring.

## SPECIFICATIONS

	SQC-310	SQC-310C
<b>Measurement</b>		
Sensor inputs	two (four optional)	four
Measurement frequency range	6.5 to 1.0 MHz (adjustable)	
Frequency resolution <sup>1</sup>	±0.012 Hz at 6 MHz	
Thickness and rate resolution/measurement <sup>2</sup>	±0.015 Å	
Measurement interval	0.10 to 1.0 s (adjustable)	
Rate display	0.01 Å/s	
<b>Control</b>		
Storage	100 processes, 1000 layers, 50 films	
Source outputs	two (four optional)	four
Output signal	0 to ±10 V (dc), 15-bit	
Digital inputs/relays	eight / eight (16/16 optional)	16/16
Digital inputs	5 V (dc) non-isolated	
Relays	SPST Form 1 A, 30 V (dc), 2 A maximum	
Interface(s)	Standard RS-232 and USB (RS-232 and Ethernet optional)	
Remote power control	Optional	
<b>Display</b>		
Type	¼ VGA 320 x 240 active matrix color LCD	
Graphs	rate, deviation, power, or full screen numeric	
<b>General</b>		
Power	100 to 240 V (ac), 50/60 Hz, 25 W	
Compliance	CE, RoHS	
Windows® software	included	
Housing / mounting	13.3 cm (5.25 in.) half-rack W	

<sup>1</sup> Resolution given for 0.25 s measurement interval

<sup>2</sup> Tooling/density = 100/1, fundamental frequency = 6 MHz, 0.25 s measurement interval

## ORDERING INFORMATION

### SQC-310 Controller

SQC310 -  -  -

#### Channels

Two QCM channels . . . . . 2  
 Four QCM channels . . . . . 4

#### Interface

RS-232 and USB . . . . . R  
 RS-232 and Ethernet . . . . . E

#### Display

English . . . . . 1  
 Chinese . . . . . 2

### SQC-310C Controller

SQC310C - 4 -  -

#### Channels

Four QCM channels . . . . . 4

#### Interface

RS-232 and USB . . . . . R  
 RS-232 and Ethernet . . . . . E

#### Display

English . . . . . 1  
 Chinese . . . . . 2

## ACCESSORIES

782-900-017	Handheld Power Controller, 3 m (10 ft.) coiled cable
782-900-007	3U Rack Extender — mounts one SQC-310 instrument in a 48.3 cm (19 in.) rack
782-900-016	3U Rack Adapter — mounts two SQC-310 instruments in a 48.3 cm (19 in.) rack
783-500-109-10	3 m (10 ft.) Oscillator Kit – includes oscillator, 15.2 cm (6 in.) BNC, and 3 m (10 ft.) BNC