

# INFICON Zevision® IMC300

Thin Film Deposition Controller



 **INFICON**  
Inspired by visions. Proven by success.

# Precision Control for Maximum Repeatability and Unmatched Crystal Efficiency

The INFICON IMC300 is part of the next generation of INFICON Zevision deposition controllers that offer new patented technology needed for today's optical coaters.

## MODELOCK MEASUREMENT SYSTEM

INFICON Zevision IMC300 uses the INFICON ModeLock™ measurement system to maximize reproducibility and uniformity with the highest thickness accuracy, best measurement resolution, and lowest rate noise. The ModeLock measurement system will maximize uptime and throughput by extending the usable crystal life — in some cases, more than twice the expected life of a frequency counting controller.



## EASY SYSTEM INTEGRATION

System integration with INFICON Zevision IMC300 is fast and easy with backwards compatibility, logic, and the optional ability to run multiple sources at the same time using a single controller.

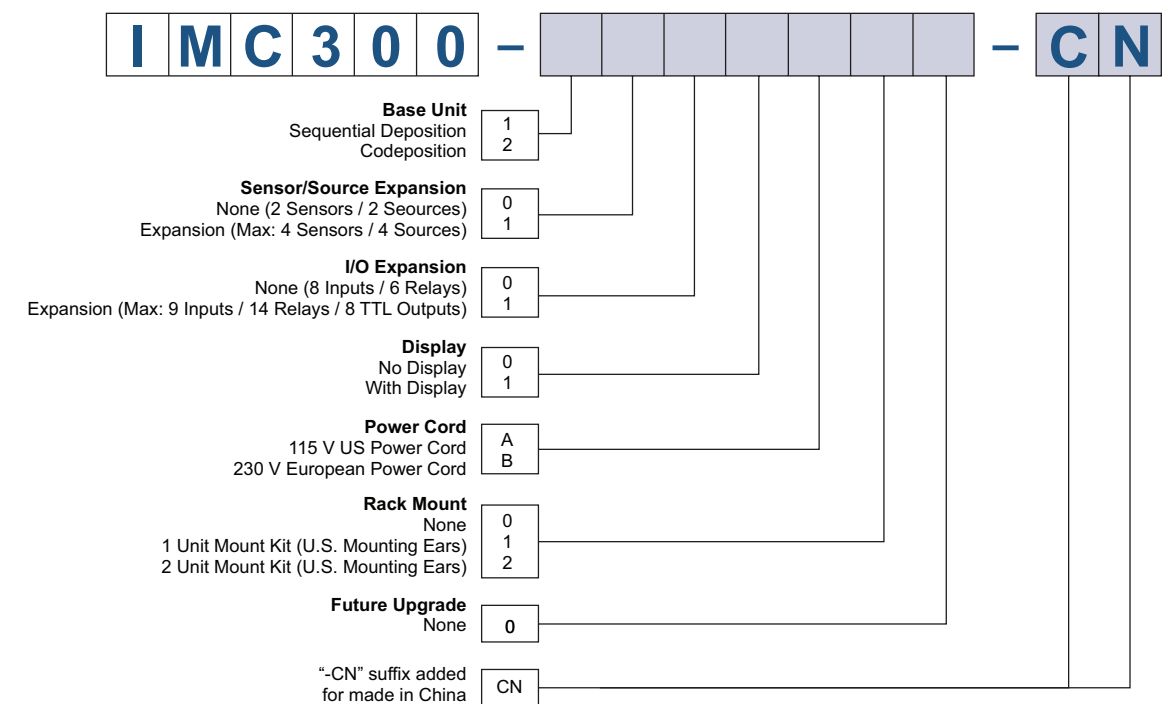
INFICON Zevision IMC300 features a touchscreen front panel with easy-to-navigate menus and intuitive recipe building.

Writing software is greatly simplified by only using ASCII printable characters with clear start and stop characters in all commands and responses. The new serial communication protocol also has help commands to learn what commands are available without referencing the operating manual.

## UPGRADES & AFTER-CARE PLAN

All firmware updates and hardware upgrades can now be performed on-site with easy to install option cards and firmware updates via the front panel USB port. Optional I/O and 2-sensor-2-source measurement boards are available for field installation with no additional tools.

Although INFICON Zevision IMC300 is built to last for decades, you can rest assured that repairs are free within the optional after-care plan period. Optional 2-year or 4-year after-care plans are available to extend beyond the standard 2-year warranty in the event your INFICON Zevision IMC300 needs repair. If the IMC300 has an after-care plan, a loaner unit can be provided if service is needed throughout the life of the instrument.



## ADVANTAGES AT A GLANCE:

- Maximize reproducibility and uniformity with the highest thickness accuracy, best measurement resolution, and lowest rate noise using the ModeLock measurement system
- Maximize number of runs possible while lowering crystal consumable cost with ModeLock (longest usable crystal life)
- Minimize integration cost and maximize integration speed with backwards compatibility, logic, and the optional ability to run multiple sources during a single process at the same time with a single controller
- Minimize development risk and optimize system performance through worldwide expert applications support

SPECIFICATIONS	
MEASUREMENT	
Crystal Frequency Range	6.0 to 4.5 MHz
Frequency Resolution	$\pm 0.00656$ Hz @ 6 MHz
Frequency Accuracy	$\pm 2.5$ ppm 0 to 50°C
Measurement Rate	10 Hz
Thickness and Rate Resolution	$\pm 0.008$ Å and $\pm 0.08$ Å/s
Thickness Accuracy	0.5%
Rate Accuracy	0.1%
DESIGN FEATURES	
ModeLock	Yes
PROCESS PARAMETERS	
Processes	200
Layers	200 per Process
OPERATION	
Operating Temperatures	0 to 50°C (32 to 122°F)
Weight	4.1 kg (9 lb.)
Main Power Supply	125/250 V(ac), 50/60 Hz
Rack Dimensions H x W x D	132.5 x 213.1 x 314.3 mm
SOURCE	
Number of Sources	2 BNC, Female (Without Option Card) (4 total sources with option card)
Control Voltage	-10 V to +10 V, user configurable
Resolution	15 bits over full range (10 V)
SENSOR	
Number of Sensors	2 Sensors (Without Option Card) (4 total sensors with option card)
Compatible Sensors	All

SPECIFICATIONS		
DIGITAL I/O		
Digital Inputs	Functions	8, event assignable
		1 additional input when I/O option card is installed
	Input Rating	24 V(dc) Max 30 V(ac) Max
Relay Outputs	Functions	6, event assignable
		1 additional input when I/O option card is installed
	Relay Rating	30 V(dc) or 30 V(ac) RMS or 42 V peak at 2.5 Amps
DISPLAY		
Type	TFT LCD Display with PCAP Touchscreen	
Format	WVGA	
Resolution	800 x 480	
Backlighting	LED	
Thickness Display Resolution	display thickness resolution = 1 Å	
Rate Display Resolution	0.1 Å/s for 0.0 to 99.9 Å/s, 1 Å/s for 100 to 999 Å/s	
Power Display Resolution	0.01%	
Data Display Rate	1 Hz	
Graphic Display Functions	Rate Deviation $\pm 5, 10, 20,$ or 40 Å/s or Power at 0.0 to 100%	
COMMUNICATIONS		
Type	RS-232/Ethernet	



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