



XTC/3

Thin Film Deposition Controller

ADVANCED, AFFORDABLE RATE CONTROL FOR SINGLE OR MULTIPLE LAYERS

Now get everything you want in a thin film deposition controller for single and multiple-layer processes. The XTC/3 with patented ModeLock¹ provides proven mode hop prevention for consistent quality. With the XTC/3 Thin Film Deposition Controller, you get highly accurate control of deposition rate and thickness, the capacity for virtually any number of layers, easy installation, and extremely high reliability to ensure productivity.

INFICON, the global leader in thin film deposition control, now offers an instrument with a remarkably low cost of ownership for unprecedented value.

Whether your control needs reflect production or research and development use, you will find a precise match in the INFICON XTC/3.

WORLDWIDE INFICON SUPPORT

No matter where you are, you get fast answers, attentive service, and maximum uptime. With offices around the world, INFICON is the only manufacturer of thin film deposition controllers to offer you local service and technical support around the world.

FEATURES AT A GLANCE

- available in single-layer and multiple-layer models
- patented ModeLock technology prevents film thickness errors caused by mode-hopping
- supports INFICON Crystal 12™, CrystalSix® and dual sensor automatic crystal switching for maximum productivity
- XTC/3M multiple-layer model supports up to 99 processes, 999 layers, 32 films, 2 sensors and two sources
- XTC/3S single-layer model supports up to 9 films, 2 sensors and two sources
- easy-to-read TFT LCD graphics displays
- films and processes can be assigned unique, descriptive names for easy retrieval
- Ethernet connection available
- free-standing (no computer necessary) or optional Windows® software for PC operation
- plug-and-play replacement for INFICON XTC/2 controllers (limited to XTC/2 features and command set)

¹ModeLock—Patented in United States, United Kingdom, and Germany. For detailed technical information on ModeLock, visit our website for a copy of "The Technology of the Intelligent Oscillator for Quartz Crystal Measurement and its Advantages for Thin Film Processes."

SPECIFICATIONS

Feature, Parameter, or Specification	XTC/3S Single Layer	XTC/3M Multiple Layer
Frequency Change Measurement Resolution	± 0.05 Hz	± 0.05 Hz
Measurement Interval	0.25 seconds	0.25 seconds
Thickness & Rate Resolution / Measurement	0.06 Angstroms @ Tooling/density = 100, fundamental frequency = 6 MHz	0.06 Angstroms @ Tooling/density = 100, fundamental frequency = 6 MHz
Measurement Technology	ModeLock	ModeLock
Number of Processes	1	99
Number of Layers	1	999
Number of Material Programs (or Films)	9	32
Number of Sensor Inputs	2 standard	2 standard
CrystalSix / Crystal 12 Sensor Support	Yes	Yes
Support XTAL2 Switch	Yes	Yes
Number of Source Outputs	2 standard	2 standard
Computer Communications	RS232 standard, Ethernet TCP/IP optional	RS232 standard, Ethernet TCP/IP optional
Max RS232 Baud Rate	115.2 KBaud	115.2 KBaud
Automatic Crystal Switch	Yes	Yes
Number of Relays	12 standard, Not Event Assignable	12 standard, Event Assignable
Number of Programmable Relay Functions	1	1
Functions per Relay	1	1
Relay Voltage Rating	30VDC or 30VAC RMS or 42V peak at 2.5 Amps	30VDC or 30VAC RMS or 42V peak at 2.5 Amps
Number of Inputs	8 TTL, 24VDC Max	8 TTL, 24VDC Max
Number of Programmable Input Functions	1, Not Event Assignable	1, Event Assignable
Number of Recorder Outputs	1	1
Manual Power / Hand Held Controller	Yes	Yes
Exhaust Fan	No Exhaust Fan	No Exhaust Fan
Test Mode	Yes	Yes
Shutter Delay	Yes	Yes
Secondary Tooling	Yes	Yes
Crystal Starting Frequency	6 MHz	6 MHz
Maximum Allowed Frequency Shift	1.0 MHz	1.0 MHz
Case Dimensions	half rack, 2U high	half rack, 2U high
Rate and Thickness Display Resolution	0.1 A/s for 0.0 to 99.9 A/s, 1 A/s for 100 to 999 A/s, display thickness resolution = 1 A	0.1 A/s for 0.0 to 99.9 A/s, 1 A/s for 100 to 999 A/s, display thickness resolution = 1 A
Film Select via Inputs	Yes	No
User Guide Languages	English, Chinese	English, Chinese
Control Loops	PID	PID
Software to Operate from PC	Yes	Yes
Datalogging	Yes	Yes
Quality and Stability Function	Yes	Yes
Sample and Hold (RateWatcher™)	Yes	Yes
Crucible Selection	Yes	Yes
Crucible Feedback Input	Yes	Yes
Select Control Voltage Polarity	Yes, +/- 2.5, 5, 10 Volts; 15-bit Resolution	Yes, +/- 2.5, 5, 10 Volts; 15-bit Resolution
Program Lock Code	Yes	Yes
Display with Graphics	Yes	Yes
User Labeled Processes (cell phone style alphanumeric entry)	No	Yes
User Labeled Films (cell phone style alphanumeric entry)	No	Yes
Transfer Sensor Control	Yes	Yes
XTC/2 RS232 Communications Compatibility	Yes (limited)	Yes (limited)



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