

IQM-233

Thin Film Deposition Controller Card

LOW-COST DEPOSITION CONTROL ON A PCI EXPRESS CARD

The IQM-233 PCI Express card turns your PC into a thin film deposition controller. This INFICON designed and manufactured product is the ideal choice for system OEMs, or anyone wishing to incorporate a thin film deposition controller into an existing PC or PLC controlled system. Installation is simple—all you need is an unoccupied PCI Express slot. IQM-233 is available to fit in standard or small form factor PC towers.

UNPARALLELED FEATURES

The IQM-233 features three QCM sensor inputs and three source outputs on each card. Up to two IQM-233 cards can be installed in a single PC (using optional IQS-233 software), giving you a maximum of six sensor inputs and six source outputs. Only INFICON offers this level of flexibility in a fully integrated PC controlled QCM controller.

IQM-233 is compatible with INFICON oscillator IPN 782-900-010, so replacing an SQM-242 card does not require a new oscillator. It is also compatible with all INFICON single and dual sensor heads.

FEATURES AT A GLANCE

- PCI Express
- Three sensor inputs, three control outputs
- Install multiple cards in a PC
- Codeposition of multiple sources
- Easy PLC integration to add I/O capabilities
- Easy to use
- Value price

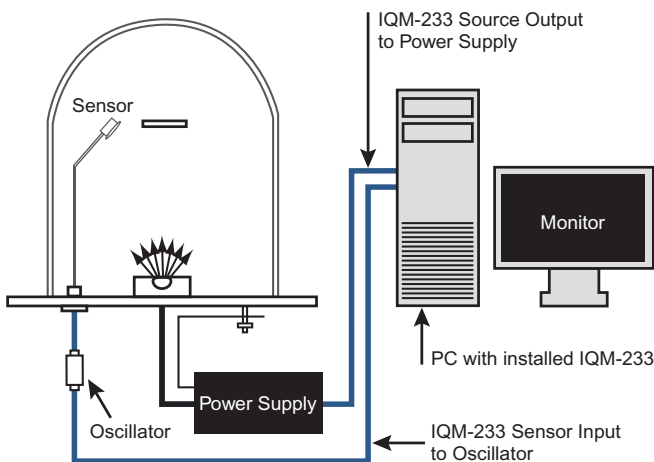
CHOOSE THE SOFTWARE SOLUTION RIGHT FOR YOU

IQM-233 includes basic Windows® software for setup and control of simple sequential or co-deposition processes with one IQM-233 card. The optional IQS-233 advanced Windows software allows for more complex process setup, including multi-layer codeposition, graphing, and PLC integration with event selectable relay/input functions. IQS-233 software also allows for use of up to two IQM-233 cards.

As an alternative for customers wanting to write their own software, the IQM-233 includes a LabVIEW™ sample program to provide basic functionality and demonstrate programming techniques.

INFICON WORLDWIDE SUPPORT

The IQM-233 card is designed and supported by INFICON, a worldwide leader in QCM control. No matter where you are, you get fast answers, attentive service, and the support you need to keep your INFICON product running smoothly. With offices around the world, INFICON offers local technical support and service where you need it.



Typical system configuration.

SPECIFICATIONS

Computer Requirements

- 1.5 GHz or better CPU
- 2 GB RAM
- 200 MB of free HD space
- Minimum screen resolution of 1152 x 648
- Windows XP SP3, Windows 7 32/64-bit, Window 8 32/64-bit
- One PCI Express slot (any size) is required for each IQM-233 card.
- 800 x 600 minimum resolution.

IQM-233 Thin Film Deposition Controller Card

| Sensor Inputs | Three QCM Sensor Inputs | Outputs | Three Analog Source Outputs |
|--|------------------------------------|--------------|---|
| Connectors | SMA – Includes one SMA/BNC adapter | Connectors | 15-pin high density D-sub |
| Frequency Range | 4 to 6 MHz | Signal | 0 to ± 10 Vdc |
| Frequency Resolution (per 500ms sample) | 0.05 Hz | Resolution | 15 Bit Plus Sign |
| Resolution* | 0.0613 Å/s/M* | Impedence | 50 Ω |
| Sample Period | 0.1 to 2 sec | PC Interface | PCIe x1 – PCI Express Slot (Std or SFF) |

* Material density = 1.0; z-ratio = 1.0; crystal frequency = 6 MHz
 Å/s/M = Angstroms/second/measurement

ORDERING INFORMATION

| | |
|----------------|---|
| 782-IQM-233-G1 | IQM-233 QCM controller card for standard PCI Express slot |
| 782-IQM-233-G2 | IQM-233 QCM controller card for Small Form Factor (SFF) PCI Express slot |
| 782-IQS-233 | IQS-233 Codeposition software |
| 600-1441-P1 | SMA to BNC adapter for IQM-233 sensor inputs (one required for each sensor input) |

IQM-233 Standard Software (included with IQM-233)

- Provides basic setup and deposition control for one IQM-233 card.
- Sample LabVIEW program includes source code.
- Simple monitoring or control of up to three sensors and/or sources.
- Simple codeposition of up to three sources.

Optional IQS-233 Codeposition Software

- Provides complete setup and deposition control for one or two IQM-233 cards.
- Multi-layer process recipes, pre/post conditioning, and digital I/O capabilities (requires a PLC).
- Codeposition of up to six sources.



www.inficon.com reachus@inficon.com

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