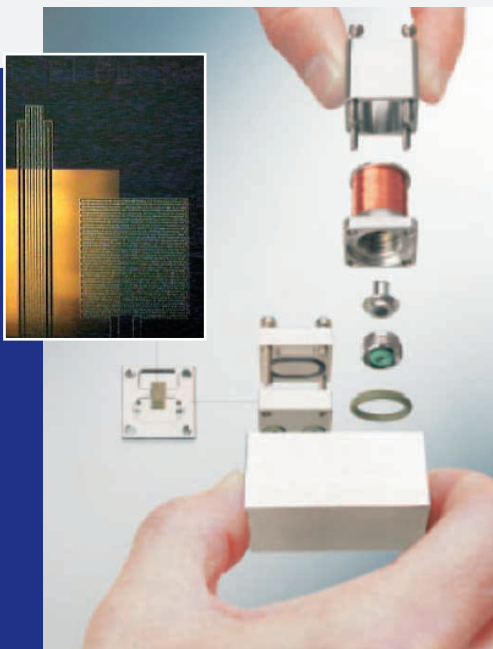




**Bronkhorst®**  
**HIGH-TECH**

*A solution for:*

## Microfluidic mass flow and pressure meters/controllers with high intrinsic quality



### Microfluidic flow/pressure controllers

Equipment manufacturers are looking for compact solutions to monitor or control the gas flow or pressure in their system. Previously, conventional mass flow and pressure meters and controllers needed a footprint of 1.5", as for instance specified in the NeSSI™ System. In close co-operation with LioniX BV, Bronkhorst High-Tech has developed the IQ+FLOW mass flow sensor. Due to the use of micro system technology (MST/MEMS), Bronkhorst High-Tech has been able to halve the footprint dimension to 0.75", thereby realizing ultra compact flow and pressure controllers.

### High intrinsic quality

- Very stable Zero, due to the thermally balanced chip-sensor
- Compact assembly ensures space efficiency
- Low cost of ownership
- Tubeless construction reduces potential leak points
- Top-mount modules: easily accessible
- Pre-tested "Plug and Play" units, reducing custom testing requirements
- Analog and digital (RS232) communication

### Customer specific design

A core philosophy of Bronkhorst High-Tech is to form close working links and collaborations with Original Equipment Manufacturers to ensure optimized integration of our instruments within their equipment. Most often this results in a bespoke design in which various functions are combined into one micro fluidic system.

### Analytical applications

Examples of analytical applications based on the ultra compact modules with footprint of 0.75" are:

- Flow-Pressure control at the injector side of a GC
- Flow control at the detector side of a GC or HPLC
- Flow control in an FID detector

*designed and  
manufactured by:*

**LioniX** 

## Lionix BV

Lionix is a leading provider in development and small to high volume production of leveraging and innovative products based on microsystem technology and MEMS. Our core technologies are integrated optics and microfluidics.

LioniX' customers operate in telecom, industrial process control, life sciences and space markets and include OEM's, multinationals, VC start-up companies as well as research institutions from around the world.

LioniX offers design for manufacturing and horizontal integration by partnering with MEMS/MST foundries and suppliers of complementary technologies. Cooperations are based on subcontracting, licensing of IP or joint ventures.



*For more information please contact*

### LioniX BV

Dr Hans van den Vlekkert, *President & CEO*  
PO Box 456  
7500 AH Enschede  
The Netherlands

Telephone + 31 53 489 3827  
Fax + 31 53 489 3601  
e-mail [info@lionixbv.nl](mailto:info@lionixbv.nl)  
web [www.lionixbv.nl](http://www.lionixbv.nl)

## Bronkhorst High-Tech

Bronkhorst High-Tech, the European market leader in thermal Mass Flow Meters/Controllers and Electronic Pressure Controllers, has over 20 years of experience in designing and manufacturing precise and reliable measurement and control devices.

With a wide range of instruments, Bronkhorst High-Tech is offering innovative solutions for many different applications in many different markets.

The instruments are made to customers' specification, in various styles, suitable for use in laboratory, industrial environment, hazardous areas, semiconductor or analytical installations.



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*For more information please contact*

### Bronkhorst High-Tech

Mr. Henk Wassink, *Technical Sales Manager*  
Nijverheidsstraat 1a  
7261 AK Ruurlo  
The Netherlands

Telephone +31 573458800  
Fax +31 573458808  
email [sales@bronkhorst.com](mailto:sales@bronkhorst.com)  
web [www.bronkhorst.com](http://www.bronkhorst.com)