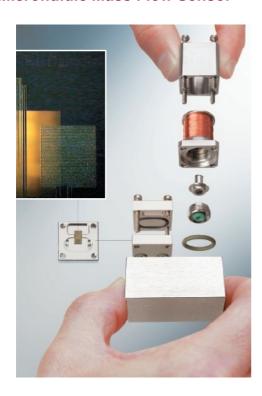
# MEMS Solution for Bronkhorst

# **Microfluidic Mass Flow Sensor**



## 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 NeSSITM System. In close co-operation with LioniX, 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 tailor-made 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

# LIONIX INTERNATIONAL



## **Bronkhorst High-Tech**

Bronkhorst High-Tech, the European market leader in thermal Mass Flow Meters/Controllers and Electronic Pressure Controllers, has over 30 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.

www.bronkhorst.com

### **LioniX International**

LioniX International is a leading global provider of customized microsystem solutions in scalable production volumes.

We provide customized solutions for OEM's and System Integrators, from design to fully assembled modules, by vertical integration and in scalable production volumes. We maintain our technology leadership secured by a strong IP position.

LioniX International core competences are in Photonic Integrated Circuits (PIC), customized MEMS, and opto-fluidics.

Read more on https://mems.lionix-international.com

Our chips drive your business

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