



## **MCM**SALES Hygrometer Solutions

We know that specifying a new hygrometer can be a daunting task.

Many factors influence moisture measurement, so identifying and quantifying the required performance characteristics of an analyzer can seem like searching for a needle in a haystack. Where do you start? And what questions should be asked?

Much depends on the nature of the application and its criticality to the business. A clean production process may only require a simple transmitter, whilst a heavily contaminating process calls for robust sensor protection.

Each client has different goals and there are many parameters to consider, but the one question we all need to ask of any such equipment is, *"How reliable will this solution be?"*

At MCM, we've spent 40 years thinking about this question and it is core to both our business philosophy and design approach.

Today we are proud to offer a range of instrumentation that is supported by sound technical advice and which deals with moisture applications in an accurate and reliable manner. It's a bold claim, but one we are happy to prove.

So, whether you are concerned about stabilising temperature coefficients, improving speed of response or negating the effects of contamination, you can be assured that we've done the thinking and packaged a solution that fits your application, be it for portable or online measurement.

Take a look at our checklist overleaf and see if we missed anything.

### **What's the question?**

- Is the hygrometer fast, stable and repeatable?
- Is the calibration traceable?
- Can it withstand contamination?
- How quickly can it detect process upset?
- Can the supplier support me technically?

### **And what's the MCM answer?**

- Yes, due to the unique temperature controlled sensor
- Yes, to mass standards via BS ISO 6145-8:2005
- Yes, with sensor cleaning feature and self-adjustment
- Quicker than anyone else – guaranteed
- Yes, with global training, service and consultancy



We've designed a simple checklist of features that you should look for when specifying a hygrometer – use it to see how MCM compares to the competition.

## CRITICAL FACTORS IN MOISTURE ANALYSIS – HOW DOES YOUR PROCESS COMPARE?

### 1) TRACEABILITY

Specify a level of traceability relevant to the process. If you're measuring in ppmV, this needs to be Mass derived and *not* based on a dewpoint system.

### 2) SPEED OF RESPONSE

Can a process upset occur *faster* than your analyzer can detect? Aim to achieve real-time response to identify breakthrough before it becomes critical.

### 3) INDEPENDENCE FROM PROCESS CONDITIONS

Is your analyser affected by changes in temperature, pressure, flow or gas density? The ideal hygrometer should provide consistent performance through a range of differing process conditions.

### 4) REPEATABILITY

Can you rely on your analyzer to achieve consistent results in the process, and how can you judge this performance? Look for in-built validation features, which allow simple assessment at the push of a button.

### 5) RESISTANCE TO CONTAMINATION

How robust is the sensor technology that you are planning to use? How is it affected by contamination and what strategies can be used to mitigate the effects?

### 6) EASE OF USE

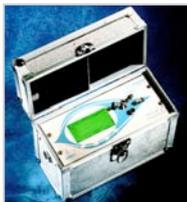
How simple is it to operate the technology? The greater the level of complexity, the greater the risk of introducing errors through human intervention. Look for simple solutions that bring confidence through reliable operation.

### 7) VENDOR EXPERTISE & SUPPORT

How much experience does your chosen vendor have? Can they offer detailed technical support when you need it urgently? Do they provide value added services such as traceable calibration, operator training or consultancy?

*MCM have developed a series of documents that further explain the above factors and their influence on successful hygrometry. Search "MCM – The Truth Is Out There" or scan the QR code at the bottom of this page.*

## A BRIEF OVERVIEW OF MCM'S HYGROMETERS



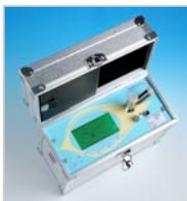
### MicroView Portable

Applied throughout the world on a range of applications where fast and reliable spot-checking is required. This robust analyser provides transfer-standard performance in the field and provides a wealth of automated features, audit tools and self-validating capability.



### MicroView Mini

State-of-the-art moisture transmitter for on-line analysis and system integration, measuring just 220 x 108 x 50mm. Sub-ppb[V] LDL – ideal for critical applications where long-term stability and real-time response are required. Ideal for all inert gases including Ar, O<sub>2</sub>, N<sub>2</sub> and He.



### MicroView ATEX Portable

ATEX certified version of the MicroView Portable, widely employed for hazardous area measurement on petrochemical applications or where an explosion risk exists. Fast, reliable and resistant to contamination, this unit offers high quality data in demanding conditions.



### MicroView ATEX Compact

Certified II 1G EEx ia IIC T4, this palm-sized transmitter is used in hazardous area applications. Commonly applied in our Auto-Zero self-validating systems, the MicroView Compact's niche is in demanding petrochemical processes that demand long-term robust performance.

*For detailed product specifications contact MCM or visit our website.*

## CUSTOMER TESTIMONIAL

*"As part of our continued partnership, we would like to compliment you on your work to supply us with industry-leading analysers and on your continuous improvement, which mirrors our work ethic. We have the confidence to tell our customers that we supply them with the highest quality products, which are tested on analysers from MCM Ltd."*



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