

Features

- Chilled-mirror type hygrometer
- First-principle measurement – no measurement drift
- Laser-based interferometric analysis technology
- Registration of both the water dew point and hydrocarbon condensation temperature with one instrument
- Suitable for gases containing H₂
- ATEX: II 2 G Ex IIB +H2 T5 Gb
- RS-485 digital or 4...20mA analogue data connection
- “Smart” mirror cleaning mode
- Low maintenance
- No consumables
- Lightweight and compact
- Water dew point measurement in accord with DIN 51871, ISO 6327, and ASTM D 1142
- Hydrocarbon condensation temperature measurement in accord with ISO TR 11150, ISO TR 12148, and ASTM D 1142



Technical data

| | | |
|----------------------------------|----------------------------|---|
| Measurement range | Water / HC | -50...+30 °C* ΔT ≤ 70 °C |
| Accuracy | | ±0.5 °C |
| Measurement frequency | | 14...18 cycles / hour (max) |
| Sample gas flow rate | | 0.2...2.0 Nl/min. |
| Ambient temperature | | -10...+50 °C |
| Gas sample pressure | | ≤ 160 bar ≤ 230 bar |
| Ingress protection rating | | IP67 |
| Explosion-proof rating | ATEX GOST R TC TR Ex | II 2G Ex IIB+H2 T5 Gb 1 Ex d IIB T5 1 Ex d IIB T5 X |
| Interface | Select either | RS-48 Modbus / RTU 4...20 mA |
| Power supply | | 20 – 27 V DC |
| Power consumption | | 15 V (max) |
| Dimensions | | 207 x 112 x 235 mm |
| Weight | | 6.5 kg |

* Supplemental cooling is necessary when measuring dew points < -30 °C.

Product development and improvement are ongoing, therefore product data and specifications may be altered without prior notification.



CONG Prima 2M Dew Point Transducer

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VYMPEL

CONG Prima 2M

Dew point for everyone

The **CONG Prima 2M** is a state-of-the-art automatic continuous-flow chilled-mirror hygrometer. It provides accurate and repeatable dew point measurements, and is suitable for a wide range of applications.

Featuring VympeL's advanced laser-based analysis technology, the CONG Prima 2M can measure both the water dew point, the hydrocarbon condensation temperature or both values alternately using the same measurement cell.

Advanced interferometric technology

VympeL's advanced registration technology takes advantage of the phenomenon of "total refraction" to achieve an unprecedented level of sensitivity.



Inherently safe and robust

The enclosure of the CONG Prima 2M features a monobloc construction comprising a sensor cell, an electronic unit, and an explosion-proof housing. In addition, the measurement cell is located exterior to the inner cavity of the housing.

This placement ensures that no leakage of the sample gas can ever result in a dangerous over-pressurization of the analyzer as compared to competing designs.

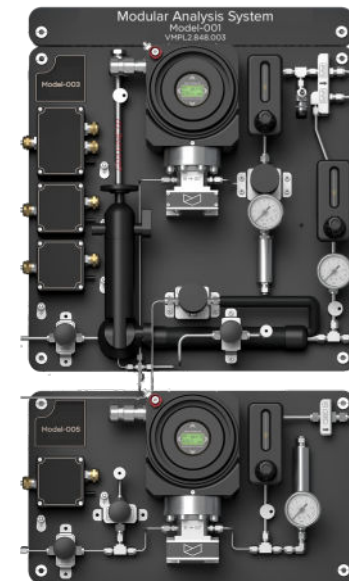
Multiple installation options

CONG Prima 2M dew point analyzers offer a variety of options for installation. This instrument is ideal for installation as part of a **gas preparation system** and, like all VympeL online analyzers, it is equally well-suited for installation directly on the pipeline.

On-the-pipeline, also known as "**in situ**" installation, is available with filtration. In specific situations, in situ installation can be configured to provide sampling that results in **zero emissions!**

Gas Preparation System

The CONG Prima-2M can be delivered complete with a gas preparation system. VympeL systems are modular in design and incorporate a number of patented innovations that ensure accurate measurement results. The modular nature of VympeL gas preparation systems means that they can be optimized for specific applications.



In situ

For in situ installation the CONG Prima-2M is mounted onto a "pipeline module" that includes an insertable sampling probe. In situ installation of a chilled-mirror hygrometer is uniquely available from VympeL. Well-suited to indoor as well as outdoor applications, in situ installation can even be configured to provide **zero-emission sampling and analysis.**

Modular Analysis System

The CONG Prima 2M is also available as the main instrument in VympeL's Modular Analysis System, which provides for optimal measurement conditions for measuring the water dew point and hydrocarbon condensation temperature, respectively.

The Modular Analysis System can also include a supplemental cooling module for measuring the water dew point at low temperatures and a module for measuring the volume fraction of oxygen in the gas.