



VYMPEL

Precision | Economy | Safety

Hygrovision mini



reddot award 2015
honourable mention industrial design

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

Mobile Accuracy

The Hygrovision mini dew point analyzer is a compact, partially automated dew point mirror for manually measuring the dew point of water, hydrocarbons, and constituents of natural gas.

It was primarily developed for use in the natural gas industry, but thanks to its convenience and functional reliability, it is equally well-suited for all applications where quick and precise dew point information is required.



Product characteristics

The analyzer consists of a high-pressure measurement chamber with an integrated condensation mirror, a removable microscope, and a control unit that includes a touch screen LED display and a rechargeable battery pack.

The measurement chamber is designed for operating pressures up to 100 bar. The battery has an operational charge life of up to 12 hours.

The Hygrovision mini has an innovative optical system developed exclusively by Vympel.

Thanks to its 40X magnification and two different modes of illumination, it is easy to distinguish between various condensate substances. Moreover, the innovative lighting system enables the operator to register an extremely tenuous condensation film as thin as 10 nm.

The Hygrovision mini is appropriate for:

- Monitoring the quality of industrial processes; for example the drying and purging of systems and facilities
- Doing spot checks in the field
- Checking the results of assorted automatic dew point analyzers



Construction

The Hygrovision mini features:

- User-friendly, intuitive operation
- Light weight (3.8 kg)
- Integrated needle valve to regulate gas flow
- Supplemental cooling channels built into the housing for measuring low temperature dew points in high ambient temperature conditions
- Adjustable-rate automatic mirror cooling (as per ISO 6327)
- Automatic mirror cleaning whereby the surface of the mirror is heated to +55 °C
- Remaining battery charge shown on the analyzer display

Technical Data

Measurement range	Water / HC	- 50 °C...+30 °C* ΔT ≤ 60 °C
Absolute error	Water / HC	±0.5 °C...1 °C
Sample gas volume flow rate		0.3...1 L/min
Ambient temperature		- 10 °C...+50 °C
Pressure measurement range		≤ 100 bar**
Housing protection type		IP 56
Battery-powered operation (per charge)		12 hours
Dimensions (without microscope)		241 mm x 120 mm x 110 mm
Weight (without attachments)		3.8 kg

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

** Not applicable to accessories (such as gas sample hoses)

