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HYGROVISION-MINI

Water dew-point and hydrocarbon
condensation temperature hygrometer

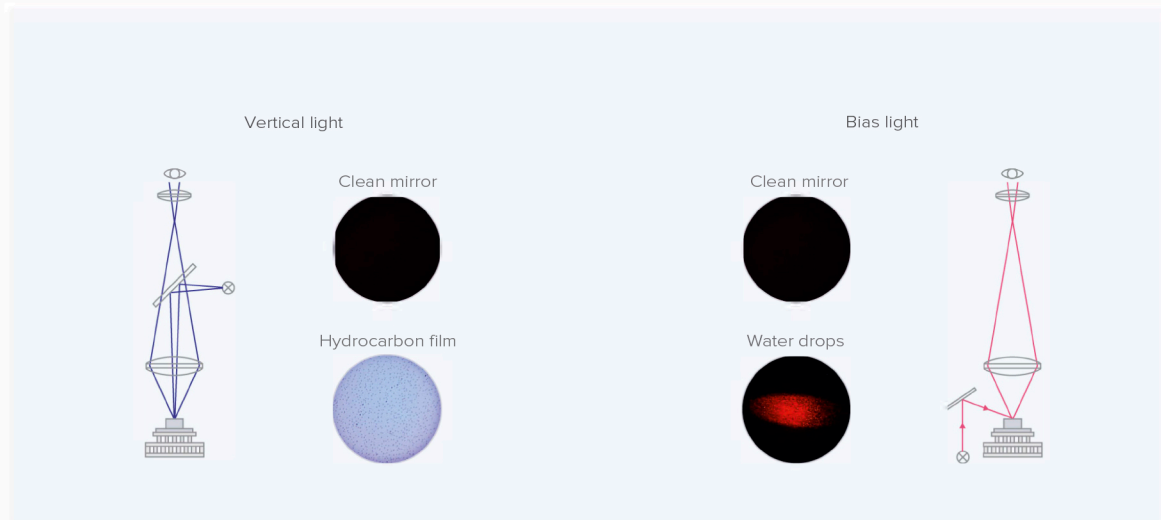


The Hygrovision Mini is a compact manual visual water dew-point and hydrocarbon condensation temperature hygrometer that operates according to the chilled-mirror principle with an independent power supply.

This instrument is designed for measuring the hydrocarbon condensation temperature and the water dew point in strict conformance with GOST R 53763-2009, GOST R 53762-2009 and STO Gazprom O89-2010 in natural gas and other gases at operating pressure.

Characteristics

Range of dew point and hydrocarbon condensation temperature measurements, °C	Range I	-30 ... T ambient
	Range II	-50 ... T ambient
Accuracy limits, °C		±1
Operating pressure (bar) and operating temperature (°C) of target gas		10 to 100/300 -20 ... +50
IP degree of protection in accordance with GOST 14254-96		IP67
Continuous operating time, hours, minimal		12



Hygrovision mini

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 additives in 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 features

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 battery.

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 easily 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 ≤ 70 °C
Absolute error	Water / HC	±1°C
Sample gas volume flow rate		0.3...0.5 L/min
Ambient temperature		- 10 °C...+50 °C
Pressure measurement range		100 bar
Sample gas temperature range		- 20 °C...+50 °C
Housing protection type		IP 54
Battery-powered operation (per charge)		12 Std.
Dimensions (without microscope)		241 mm x 120 mm x 110 mm
Weight (without attachments)		3.8 kg

*with supplemental cooling