

PRODUCT DATA SHEET

5920 Moisture Analyzer

Low parts per billion (ppb) gas analysis - ideal for critical moisture measurement applications

The 5920 is an easy-to-use process moisture analyzer that offers a wide range of performance features: multi-gas compatibility, exceptional accuracy, on-line verification, fast response speed, and wide measurement range. Equipped with an on-line verification system, this state-of-the-art analyzer is designed to rapidly build and maintain operator confidence in its analyses.

Multi-gas compatibility

The 5920 combines the excellent multi-gas compatibility with an easy-to-use operator interface. A single, simple menu selection is all that is needed to reconfigure the 5920 for a new gas type. The 5920 is compatible with virtually all bulk, ultra-high-purity gases including inerts – helium (He), argon (Ar), neon (Ne), xenon (Xe), krypton (Kr) – hydrogen (H₂), oxygen (O₂), and nitrogen (N₂).

Exceptional accuracy

With an accuracy of ± 1 parts per billion by volume (ppbv) or $\pm 10\%$ of reading, the 5920 is perfect for moisture applications that require stable and accurate results. Quartz-crystal technology and an on-line verification system combine to constantly provide assurance that the analyzer is continuing to provide you with this superior level of performance.

Wide measurement range

The 5920 accurately measures from 1 to 150 ppbv. While this is the recommended operating range, the analyzer will provide trend indication up to 1000 ppbv, so that you can capture the nature of a process upset.



KEY BENEFITS

- Quartz-crystal technology provides accuracy, speed, and calibration stability
- Online zero gas verification confirms analytical stability
- Intuitive, easy-to-use interface with keypad and display allows access to operating variables
- Rack-mount design makes the analyzer ideal for analytical carts
- Menu-driven gas selection eliminates all manual adjustments

APPLICATIONS

- Continuous emissions monitoring system
- Spot monitoring
- Cylinder
- High purity gas production

KEY MARKETS

- Semiconductor manufacturing
- LCD/OLED display manufacturing
- Air separation

PERFORMANCE SPECIFICATIONS

Compatible gases	Inerts (He, Ar, Ne, Xe, Kr), H ₂ , O ₂ , N ₂ (contact the factory to confirm compatibility with other gases)
Range	0 to 150 ppbv. Trend indication to 1000 ppbv
Limit of detection	1.0 ppbv nominal
Accuracy	±1 ppbv or ±10% of the reading, whichever is greater
Sensitivity	Better than 1 ppbv
Response time	80% of a 25 ppb step change in either direction in less than 10 minutes
Inlet pressure	138 to 345 kPa (20 to 50 psig). Specified performance is obtained when the inlet gas pressure is maintained within ±17 kPa (±2.5 psi)
Exhaust pressure	Atmospheric
Sample flow requirement	<0.5 L/min
Inlet gas temperature	0 to 100°C (32 to 212°F). Optimal results are obtained when the inlet gas temperature is maintained at 60°C (140°F)
Outputs	Four-line by 20-character LCD display One self-powered 4-20 mA, into 100-500 ohm load analog output; can be configured for loop-powered operation RS485 and RS232 serial ports
Alarms	System alarm, concentration alarm, and data valid 30 VAC or 60 VDC max, 10 VA or 1A max, resistive
Environmental conditions	Ambient temperature range 10 to 30°C (50 to 86°F). Optimal results are obtained when ambient is maintained within ±5°C (±9°F) Relative humidity 90%, noncondensing Pollution Degree 2 Maximum altitude 2,000 meters (6,560 feet) Installation Category II Indoor use only
Utility requirements	100-132 VAC or 230 VAC ±10%, 47-63 Hz, 185W Instrument air: 550 to 690 kPa (80 to 100 psi), -40°C dew point temperature
Mounting configuration	19-inch rack
Dimensions (W x H x D)	480 x 177 x 509 mm (19 x 7 x 20 in.)
Net weight	15.9 kg (35 lb)
Approvals and certifications	UL/CSA General Safety Requirements UL/CSA Class I, Division 2, Groups A, B, C, D T4. Complies with all Relevant European Directives

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