

BRINGING CERTAINTY TO AIR EMISSIONS MEASUREMENT



DIRECTOPTICS

CRDS-based NO₂-NO_x-NO Analyzer - Patented Self-Aligned Cavities - Fast Response Time -
Low ppt to ppm Detection Limits - Intuitive Interface - Modbus Communication

DUAL-CHANNEL CRDS NO₂-NO_x-NO ANALYZER

Introducing the Direct Optics Cavity Ring Down Spectroscopy (CRDS) analyzer.

A state-of-the-art instrument designed to directly measure the criteria pollutant nitrogen dioxide (NO₂) known to affect human health. With our advanced spectroscopic technique innovations, this CRDS instrument enables precise and real-time measurement of NO₂ concentrations in ambient air. This groundbreaking technology not only detects NO₂ molecules with high precision and sensitivity, but also offers continuous monitoring of nitrogen oxides (NO_x), providing a comprehensive understanding of air quality dynamics.

Get accurate and fast measurements with Direct Optics G-60 dual-channel analyzer.

INNOVATION IN NITROGEN DIOXIDE MEASUREMENT

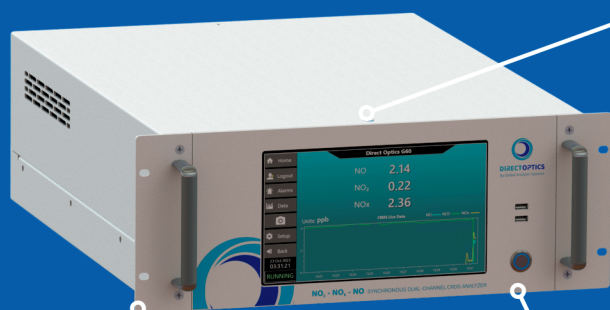
WHY CHOOSE DIRECT OPTICS?

The Direct Optics G-60 analyzer is a high-precision CRDS-based instrument with two independent channels.

Our patented self-aligned optical cavities directly & continuously measure NO_2 , NO_x and then NO .

Direct Optics G-60 offers:

- Trace level real-time direct NO_2 measurement
- Trace level real-time direct NO_x measurement
- Interference-free NO_2 measurement
- High temporal resolution (1 second)
- No purge volumes/lag time



- ✓ Ranges: 0-1,000 ppb (extendable to 10 ppm)
- ✓ Lower Detection Limits: < 40 ppt
- ✓ Flow Rate: 500 cc/min $\pm 10\%$
- ✓ Linearity 1% full scale ($r^2 = 0.999$)
- ✓ Span Drift: < 0.5% of reading/24 hours
- ✓ Zero Noise: < 20 ppt (RMS)
- ✓ Span Noise: < 0.1% of reading (RMS)
- ✓ Precision: < 0.5% of reading above 1 ppb
- ✓ Response Time: < 5 seconds to 90%
- ✓ Averaging time: 5 seconds - 300 seconds (selectable)

- ✓ Size: 23.5"(d) x 7"(h)
- ✓ Weight: 35 lbs
- ✓ Power: 100-240 VAC (50-60 Hz), 110W
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- ✓ Ethernet Connection: Modbus TCP/IP

- ✓ Patent #US 11,674,888 B2



ABOUT US

Direct Optics is redefining how air emissions are measured. Backed by proven performance and specialized knowledge in engineering, air sciences, and environmental regulations, we deliver technologies that strive to exceed expectations. Our commitment goes further, providing long-term support that safeguards your investment and ensures lasting value. At our core, we aim to provide certainty in every measurement.