

**Novel Instrumentation for Fast, Accurate Measurements
of CO₂, CH₄ and CO in the Field**

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We describe the development, testing and deployment of new compact and rugged gas analyzers for atmospheric monitoring and scientific applications. These commercial instruments operate autonomously and report measurements with high sensitivity, accuracy, and specificity in real time. Examples of commercial instruments, operating in the field, that combine near-infrared diode lasers (CO₂, CH₄) and mid-infrared quantum cascade lasers (CO, N₂O) with Off-Axis Integrated Cavity Output Spectroscopy (Off-Axis ICOS) methods will be presented.