

Why use NOx filters on CO sensors?

OVERVIEW

NOx is naturally acidic gas generated through combustion applications and it can reduce the accuracy and lifespan of CO readings. The CO values in combustion sources are critical to measuring and ensuring overall safety and calculating the efficiency of the combustion process.

CONCERN

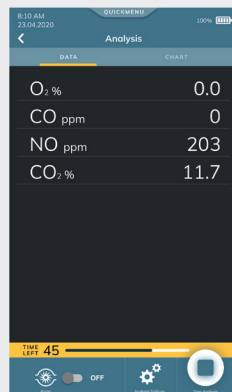
A common issue with gas sensors is the **cross-sensitivity**: a sensor developed for a specific gas, can also be sensitive to other gases, known as **disruptors**. This cross-sensitivity interference between CO and NOx exists unless a NOx filter is present with the CO sensor to remove the affecting gas. By comparing two gas analyzers **with and without NOx filter**, we can demonstrate the CO-NOx cross-sensitivity and the need for NOx filtration. This comparison shows that if a professional is measuring CO with an analyzer without a NOx filter, the **CO reading will come up at falsely high readings**. CO readings have been shown to differ **approximately 30%** in units that do not contain a NOx filter and gets worse over time.

SOLUTION

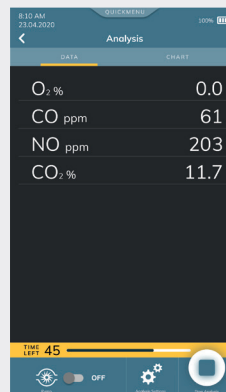
In order to maintain the best accuracy and dependability for contractors, every Seitron's HVAC Combustion Analyzer model is **equipped with Built-In NOx filtration for all CO sensors**. More over, this feature also helps to prolong the life of the CO sensor by filtering out the acidic NOx gases from damaging the sensor over time.



UNIT 1:
NOx Filter
Included



**203 ppm of
NO Gas Applied**



UNIT 2:
NOx Filter
Omitted

