



ELTEC INSTRUMENTS, INC.

## ELTECdata #162 Eltec NDIR Filter Applications

Eltec's infrared detectors are used in a wide variety of NDIR applications for environmental, medical and industrial monitoring. Each application requires the use of an optical filter to isolate the energy in the desired wavelength for the application. Eltec has sold detectors with nearly 800 different filter types, both broadband and narrowband. The following is a list of the most common gasses/substances that can be detected. Many of the filters are readily available for these applications.

Name	Formula
Ammonia	H <sub>3</sub> N
Benzene	C <sub>6</sub> H <sub>6</sub>
Carbon Dioxide	CO <sub>2</sub>
Carbon Monoxide	CO
Carbonyl Sulfide	COS
Ethane	C <sub>2</sub> H <sub>6</sub>
Ethanol	C <sub>2</sub> H <sub>6</sub> O
Hydrogen Sulfide	H <sub>2</sub> S
Methane	CH <sub>4</sub>
Nitric Oxide	NO
Nitrogen Dioxide	NO <sub>2</sub>
Nitrous Oxide	N <sub>2</sub> O
Propane	C <sub>3</sub> H <sub>8</sub>
Sulfur Dioxide	O <sub>2</sub> S or SO <sub>2</sub>
Water (Liquid)	H <sub>2</sub> O
Water (Vapor)	H <sub>2</sub> O

If you do not see your application here, contact an Eltec pyroelectric specialist with your particular application and we will search from our database of nearly 800 specialized filters and/or work with our vendors to locate a suitable filter to meet your needs. As an option, if you have an existing filter or your own customer proprietary filter(s) you wish to have mounted into the detector(s), Eltec can quote accordingly.

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