

WirelessHART® Toxic & Combustible Gas Detector Annex 1

"UE Sensor P/N"	"UE Replacement P/N"	Sensor Type	Gas Type	Gas Formula	Gas Range	Temperature Range	Calibration Gas Stabilization Time
Active							
6361-813	62169-54	NDIR	Methane	CH ₄	0-100% LEL	-40°C to 65°C	2 minutes
6361-820	62169-57	NDIR	Propane	C ₃ H ₈	0-100% LEL	-40°C to 65°C	2 minutes
6361-821	62169-58	NDIR	Butane	C ₄ H ₁₀	0-100% LEL	-40°C to 65°C	2 minutes
6361-822	62169-59	NDIR	Pentane	C ₅ H ₁₂	0-100% LEL	-40°C to 65°C	2 minutes
6361-814	62169-53	Electrochemical	Hydrogen Sulfide	H ₂ S	0-100 PPM	-40°C to 55°C	2 minutes
6361-816	62169-55	Electrochemical	Carbon Monoxide	CO	0-500 PPM	-40°C to 65°C	2 minutes
6361-819	62169-56	Electrochemical	Ammonia	NH ₃	0-100 PPM	-20°C to 40°C	5 minutes
Obsolete							
6361-801	62169-45	NDIR	Methane	CH ₄	0-100% LEL	-20°C to 50°C	2 minutes
6361-802	62169-46	Electrochemical	Hydrogen Sulfide	H ₂ S	0-100 PPM	-20°C to 50°C	2 minutes

Sensor Cross Sensitivity:

Typical Cross Sensitivity of Hydrogen Sulfide (H₂S)

Gas	ppm Tested	Signal (as ppm H ₂ S)
Carbon Monoxide	400	1.3
Hydrogen Sulfide	25	25.0
Ozone	5	-0.6
Nitrogen Dioxide	10	0.2
Sulfur Dioxide	20	3.5
Ethanol	200	-0.3
NO	50	15.9
Chlorine	10	-0.5
n-Heptane	500	-0.1
Ammonia	100	0.0
Methane	500	0.1

Typical Cross Sensitivity of Carbon Monoxide (CO)

Gas	ppm Tested	Signal (as ppm CO)
Acetylene (C ₂ H ₂)	100	88
Ethylene (C ₂ H ₄)	100	97
Hydrogen (H ₂)	100	<28
Nitric Oxide (NO)	48.6	14
Nitrogen Dioxide (NO ₂)	19.5	<0.5
Chlorine (Cl ₂)	13.7	<0.5
Ethanol (C ₂ H ₅ OH)	200	0
Hydrogen Sulfide (H ₂ S)	50	0
Sulfur Dioxide (SO ₂)	20	0
Ammonia (NH ₃)	20	0

Typical Cross sensitivity of Ammonia (NH₃)

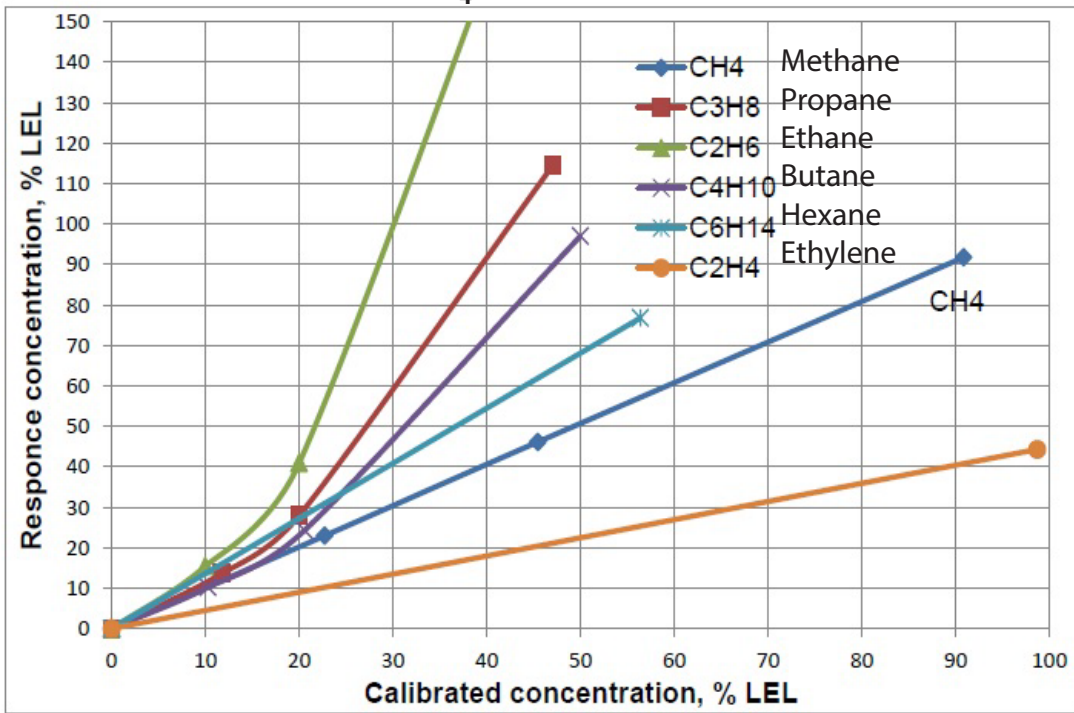
Cross Sensitivities at 20°C

Gas	Concentration	Reading [ppm]
Alcohols	1000 ppm	0
Carbon Dioxide	5000 ppm	0 ¹
Carbon Monoxide	100 ppm	0
Hydrocarbons	% range	0
Hydrogen	10000 ppm	0
Hydrogen Sulfide	20 ppm	2 ²

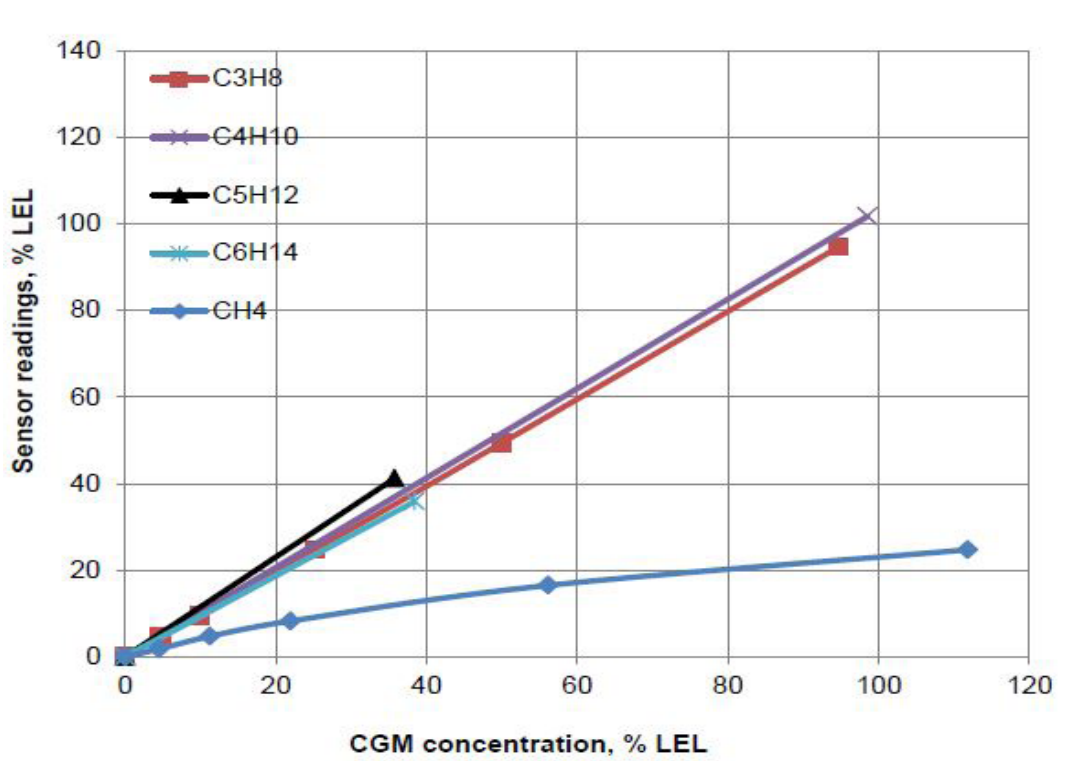
1) At higher carbon dioxide concentration (approx >5%) there can be a negative reading

2) Short gas exposure in minute range

Typical Cross Sensitivity of Methane (CH₄)



Typical Cross Sensitivity of Propane (C₃H₈)



Notes:

i. Interference factors may differ from sensor to sensor and with life time. It is not advisable to calibrate with interference gasses.

ii. This data does not claim to be complete. The sensor might also be sensitive to other gases.

