**MQ-2 sensitivity characteristics for several gases when Temp: 20℃, Humidity: 65%, O2 concentration 21%, RL=5kΩ**

X=log10(Rs/Ro)

Y= log10(PPM)

R² = 0.999 (default, except for air)

y = -2.109x + 2.983 (Hydrogen)

y = -2.123x + 2.758 (LPG)

y = -2.622x + 3.635 (Methane) R² = 0.998

y = -2.955x + 4.457 (Carbon monoxide) R² = 0.998

y = -2.692x + 3.545 (Alcohol) R² = 0.998

y = -2.331x + 3.596 (Smoke) R² = 0.992

\*\*y = -0.976x2 - 2.018x + 3.617 (Smoke)- binomial R² = 0.999

y = -2.174x + 2.799 (Propane)

**MQ-3 sensitivity characteristics for several gases when Temp: 20℃, Humidity: 65%, O2 concentration 21%, RL=200kΩ**

X=log10(Rs/Ro)

Y= log10(PPM)

R² = 0.999 (default, except for air)

y = -1.487x - 0.401 (Alcohol)

y = -2.659x + 0.659 (Benzene) R² = 0.998

\*\*\* y = -2.877x3 + 2.084x2 - 2.925x + 0.643 R² = 0.999

y = -17.95x + 29.59 (Methane) R² = 0.983

y = -2.851x + 3.889 (Hexane) R² = 0.998

\*\*\* y = 1.795x3 - 7.343x2 + 7.020x - 0.467 R² = 0.999

y = -3.386x + 4.915 (LPG) R² = 0.985

\*\* y = -2.335x2 + 3.263x + 0.253 R² = 0.998

y = -3.947x + 5.924 (Carbon monoxide) R² = 0.978

\*\*\*y = -14.40x3 + 59.52x2 - 84.98x + 42.26 R² = 0.995

**MQ-4 sensitivity characteristics for several gases when Temp: 20℃, Humidity: 65%, O2 concentration 21%, RL=** **20kΩ**

X=log10(Rs/Ro)

Y= log10(PPM)

R² = 0.999 (default, except for air)

y = -3.123x + 3.565 (LPG)

y = -2.849x + 2.997 (Methane)

y = -5.661x + 5.566 (Hydrogen)

y = -19.54x + 14.5 (Carbon monoxide) R² = 0.951

\*\*\*\* y = -12533x4 + 29290x3 - 25632x2 + 99520x - 14459 R² = 0.989

y = -13.17x + 10.35 (Alcohol) R² = 0.987

\*\*\* y = 613.3x3 - 1021.x2 + 551.9x - 93.51 R² = 0.992

y = -9.016x + 7.823 (Smoke) R² = 0.965

\*\*\*\* y = 1055x4 - 2234.x3 + 1729.x2 - 589.1x + 78.94 R² = 0.998

**MQ-5 sensitivity characteristics for several gases when Temp: 20℃, Humidity: 65%, O2 concentration 21%, RL=** **20kΩ**

X=log10(Rs/Ro)

Y= log10(PPM)

R² = 0.999 (default, except for air)

y = -3.986x + 3.075 (Hydrogen) R² = 0.954

\*\*\* y = -22.89x3 + 8.873x2 - 3.587x + 2.948 R² = 0.997

y = -2.513x + 1.878 (LPG)

y = -2.554x + 2.265 (Methane) R² = 0.998

\*\* y = -0.428x2 - 2.867x + 2.224 R² = 0.999

y = -6.900x + 6.241 (Carbon monoxide) R² = 0.961

\*\*\*\* y = 1401.x4 - 2777x3 + 2059.x2 - 682.5x + 88.81 R² = 0.995

y = -4.590x + 4.851 (Alcohol) R² = 0.991

\*\*\* y = 14.90x3 - 19.26x2 + 3.108x + 3.922 R² = 0.999

**MQ-6 sensitivity characteristics for several gases when Temp: 20℃, Humidity: 65%, O2 concentration 21%, RL=** **20kΩ**

X=log10(Rs/Ro)

Y= log10(PPM)

R² = 0.999 (default, except for air)

y = -2.351x + 3.014 (LPG)

y = -3.613x + 4.962 (Hydrogen) R² = 0.983

\*\*\*\* y = 73.80x4 - 172.7x3 + 150.3x2 - 60.77x + 12.87 R² = 0.999

y = -2.501x + 3.341 (Methane)

y = -12.51x + 14.21 (Carbon monoxide) R² = 0.99

\*\*\*\* y = -5659.x4 + 20365x3 - 27456x2 + 16423x - 3671 R² = 0.996

y = -5.885x + 7.643 (Alcohol) R² = 0.998

\*\*\* y = -26.73x3 + 62.35x2 - 54.01x + 19.93 R² = 0.999

**MQ-7 sensitivity characteristics for several gases when Temp: 20℃, Humidity: 65%, O2 concentration 21%, RL=** **10kΩ**

X=log10(Rs/Ro)

Y= log10(PPM)

R² = 0.999 (default, except for air)

y = -1.525x + 1.994 (Carbon monoxide)

y = -1.355x + 1.847 (Hydrogen)

y = -7.622x + 8.919 (LPG) R² = 0.994

\*\*\* y = 61.00x3 - 148.7x2 + 112.6x - 23.30 R² = 0.996

y = -11.01x + 14.32 (Methane) R² = 0.965

\*\*\*\* y = 3480.x4 - 14193x3 + 21627x2 - 14606x + 3694 R² = 0.996

y = -14.72x + 19.31 (Alcohol) R² = 0.923

\*\*\*\* y = -25729x4 + 11746x3 - 20087x2 + 15250x - 43357 R² = 0.989

**MQ-8 sensitivity characteristics for several gases when Temp: 20℃, Humidity: 65%, O2 concentration 21%, RL=** **4.7kΩ\*\*\***

X=log10(Rs/Ro)

Y= log10(PPM)

R² = 0.999 (default, except for air)

y = -2.568x + 0.360 (Hydrogen) R² = 0.995

y = -14.45x + 2.001 (Alcohol) R² = 0.996

\*\*\*\* y = -16078x4 - 5066.x3 - 541.7x2 - 36.87x + 1.717 R² = 0.999

y = -32.24x + 1.126 (Carbon monoxide) R² = 0.940

\*\*\*\* y = -3E+07x4 - 4E+06x3 - 20282x2 - 4515.x - 35.30 R² = 0.995

y = -16.16x + 1.093 (Methane) R² = 0.971

\*\*\* y = -281.3x3 - 12.26x2 - 7.925x + 1.668 R² = 0.998

**MQ-9 sensitivity characteristics for several gases when Temp: 20℃, Humidity: 65%, O2 concentration 21%, RL=** **4.7kΩ\*\*\***

X=log10(Rs/Ro)

Y= log10(PPM)

R² = 0.999 (default, except for air)

y = -2.132x + 2.992 (LPG)

y = -2.199x + 2.766 (Carbon monoxide)

y = -2.636x + 3.646 (Methane) R² = 0.997

\*\* y = -0.670x2 - 2.399x + 3.650 R² = 0.999

**MQ-135sensitivity characteristics for several gases when Temp: 20℃, Humidity: 65%, O2 concentration 21%, RL=** **20kΩ**

X=log10(Rs/Ro)

Y= log10(PPM)

R² = 0.999 (default, except for air)

y = -2.890x + 2.055 (Carbon dioxide)

y = -3.891x + 2.750 (Carbon monoxide) R² = 0.998

\*\* y = 1.457x2 - 4.725x + 2.855 R² = 0.999

y = -3.181x + 1.895 (ethanol/alcohol)

y = -2.469x + 2.005 (ammonium)

y = -3.479x + 1.658 (toluene)

y = -3.452x + 1.542 (acetone) R² = 0.998

\*\* y = -1.004x2 - 3.525x + 1.553 R² = 0.999

3/4ae-ethanol/alcohol

#Name? acetone

¼\*Toluene