Ammonia NH₃

No. H-10-100-40



	Extended Range	Standard Range	Extended Range
Range (ppmv)	0.5 - 7.5%	1 - 15%	2 - 30%
No. of Pump Strokes	2	1	0.5
Sample Volume (mL)	200	100	50
Sample Time (min)	2 x 2	2	1.5
Correction Factor	0.5	1	2

<u>Precision (Relative Standard Deviation)*</u>: $\leq \pm 10\%$ <u>Linearity with No. of Pump Strokes</u>: $r^2 = 0.999$

Humidity: 85% RH reduces the reading by about 25% compared to dry air

Temperature Range: No effect 0 - 40°C (32 - 104°F)_

 $\underline{Storage\ Life}{:}\ 2\ years\ in\ darkness\ at\ 5\ -\ 25^{\circ}C\ \ (40\ -\ 77^{\circ}F).\ \ Refrigeration\ preferred.$

 $\underline{\text{Color Change}} \colon \; \; \text{Orange} \; \to \; \text{Deep Purple}$

Reaction Principle: $3NH_3 + H_3PO_4 \rightarrow (NH_4)_3PO_4$

<u>Cross-sensitivity</u> : Substance	Concentration (ppmv)	Apparent Reading*
CO	3000	0
CO ₂	100000	0
SO ₂	200	0
NO	100	0
Hexane	100	0
Isobutylene	1000	0
CH₄	25000	0

^{*} Data based on Honeywell pumps and tubes used in standard range.

Other Possible Interferences: Amines and other bases