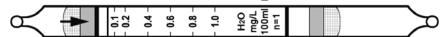
## Water Vapor (Metric) H<sub>2</sub>O No. H-10-120-30



	Extended Range	Standard Range	Extended Range
Range (mg/L)	0.025 - 0.5	0.05 - 1.0	0.1 - 2.0
No. of Pump Strokes	2	1	0.5
Sample Volume (mL)	200	100	50
Sample Time (min)	2 x 1.5	1.5	1
Correction Factor	0.46	1	2.1

<u>Precision (Relative Standard Deviation)\*</u>:  $\leq \pm 12\%$ <u>Linearity with No. of Pump Strokes</u>:  $r^2 = 0.999$ <u>Temperature Range</u>:  $0 - 40^{\circ}$ C (32 -  $104^{\circ}$ F)

Temp (°C/°F)	0/32	10/50	25/77	40/104
Corr. Factor	0.95	0.95	1.0	1.0

Storage Life: 2 years in darkness at 5 - 25°C (40 - 77°F) Refrigeration preferred.

Color Change: Yellow → Dark Green\*\*

 $\underline{\text{Reaction Principle}}\colon \ \ \text{H}_2\text{O} \ + \ \ \text{Mg(ClO}_4\text{)}_2 \ \rightarrow \ \text{Mg(ClO}_4\text{)}_2 \bullet \text{H}_2\text{O}$ 

Cross-sensitivity:	Concentration	Reading*
Substance	(ppmv)	(mg/L)
CH <sub>4</sub>	100%	0
Propane (C <sub>3</sub> H <sub>8</sub> )	10000	0
CO	200	0#
CO <sub>2</sub>	10%	0#
SO <sub>2</sub>	1500	0#
H <sub>2</sub> S	600	0#
NH <sub>3</sub>	250	0.6
PH₃	500	0
HCI	300	0#
Methanol	100	~0.02‡
Triethylene glycol	Saturated	~0.05
Toluene	400	<0.1

<sup>\*</sup> Data based on Honeywell pumps and tubes used in standard range.

Other Possible Interferences: Amines, alcohols.

<sup>#</sup> No interference in mixtures with water vapor.

 $<sup>\</sup>ddag$  No response below 100 ppm. Positive interference when methanol is above 100 ppm. 250 ppm alone reads ~0.5 mg/L.

<sup>\*\*</sup> Note: Read tube at end of dark green stain. Color tends towards purple as temperature decreases.