



- **10Bq/m³ in 24 hrs**
- **185Bq/m³ in 1 hour**
- **370Bq/m³ in 20minutes**
- **3.7K Bq/m³ in 3seconds**
- **Stable, Accurate Measurements**
- **Self Contained**
- **Real-Time Concentration Measurement**
- **Release Rate**
- **Includes Real-Time Alarm**
- **Dynamic Background Compensation**
- **Can Actuate Remote Control**
- **Particulate and Ion Inlet Filters**
- **Wall Mountable**
- **Optional Measures Tritium as HTO in Presence of Other Radioactive Species**

The CMS-H325L range of tritium monitors are sensitive, rugged stack or effluent monitors for detection and measurement of airborne tritium. The subtractive balanced chamber electrometer circuit decreases background effects to negligible levels, and the de-ionized and filtered intake reduces to negligible levels spuriousity based on smokes, dusts and existing ionization in the air. Inlet and outlet hoses allow the return of monitored air to source: interiors of fume hoods, exhause stacks etc. Related models are available to selectively measure only airborne HT or only HTO or C-14 or to exclude Ar-41, Ra etc.

In addition a standard version and extended range version is available.

Integrate to Determine

Total Daily RELEASE:

The CMS-H325L automatically multiplies real-time concentration by volumetric stack discharge and reports total daily release, weekly and annual release.

Background:

Essentially eliminated by subtractive balanced chambers.

Smoke, Dust & Ion Elimination:

Filter and de-ionizer reduce effects to negligible levels.

Circuit:

Electrometer circuit amplifies net difference between a 25 litre tritium internal chamber and internal background chamber of identical size and configuration.

Information and specification within this publication may change without notice



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SPECIFICATIONS:

Model:	ALL MODELS BOTTOM OF RANGE	STG-7L2 TOP OF STD RANGE	STG-7L2A TOP OF EXTENDED RANGE
Rate:	$1 \times 10^{-7} \mu\text{Ci/cc}$ 0.1 pCi/cc 3.7K Bq/m ³	$1 \times 10^{-3} \mu\text{Ci/cc}$ 999.9 pCi/cc 37M Bq/m ³	1.0 $\mu\text{Ci/cc}$ 0.999 $\mu\text{Ci/cc}$ 37G Bq/m ³

Model:	STG-7L2 BOTTOM OF RANGE	TOP OF RANGE	INTEGRATION TIME
Integrate for	3×10^{-10} (10 Bq/m ³)	$1 \times 10^{-6} \mu\text{Ci/cc}$ (370 Bq/m ³)	24 Hrs
Determining Concentration:	5×10^{-9} (185 Bq/m ³)	$1 \times 10^{-5} \mu\text{Ci/cc}$ (3.7K Bq/m ³)	1 Hrs
	1×10^{-8} (370 Bq/m ³)	$1 \times 10^{-4} \mu\text{Ci/cc}$ (37K Bq/m ³)	20 Min

Specifications

Detector:	Air stream is passed through sample chamber to measure all radioactive gas content; normally as tritium, optionally as other (e.g. Xenon, Drypton, ¹⁴ CO ₂ , etc.)
Calibration:	Can be calibrated internally with tritium (or HTO) gas or can be checked at a single point with an external (not provided) beta / gamma source.
Levels and Data Outputs Digital:	RS-232 / RS-485
Analog:	Optional 4-20 mA.
Alarm:	High level: Red flashing light plus audible sounder. Activity and failure modes.
Remote Alarm:	Volt free contacts for system failure. Volt free contacts for high level alarm.
Dimensions:	36" wide x 30" high x 17.5" deep. (92cm X 76cm X 45cm)
Shipping Weight:	100kg.
Optional Features / Accessories:	Remote alarm (audible and visual) 4-20mA for computer. Other manual range switching or auto-range features. Relay contacts for high or low alarm, or both. Interconnection to / from port of other gas or particulate monitor. Readout as radioactive gas other than tritium.



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