Model ~ CURIE - H3-5 ~ Model ~ CURIE - H3-8

FEATURES:

NO COUNTING GAS OR LSC COCKTAIL REQUIRED ~DOES NOT GENERATE WASTE~

- EXCEPTIONAL WIDE RANGE WIPE COUNTER
 - 5 DECADE STANDARD
 - 8 DECADE OPTIONAL
- > HIGH END TO 1 CURIE OR ABOVE
- > ION CHAMBER OPERATION
- FM-9W SMART ELECTRONICS & COLOR MONITOR
- > 1" DIAMETER SAMPLE CAPACITY
- > SELECTABLE ALARM
- WINDOWLESS STANDARD
- ➤ USB OUTPUT / ETHERNET
- > USER SETTABLE MEASUREMENT UNITS



FM-9W SMART ELECTRONICS



CURIE-H3-5 & CURIE-H3-8 ION CHAMBER DETECTOR

APPLICATION:

Model CURIE-H3-5 & CURIE-H3-8 Wipe Test Systems designed for low energy HIGH activity counting.

- It is ideal for applications in fusion research or in
- > Tritium production and use.
- The instrument includes planchettes, a sample drawer which accepts samples up to 1" in diameter.
- This instrument is designed for ease of maintenance.

UNIQUE ION CHAMBER SAMPLE COUNTER
PROVIDES HIGH RANGE TRITIUM
MEASUREMENT & ELIMINATES THE NEED
FOR A PRESSURIZED GAS SUPPLY OR LSC
COCKTAIL

DESCRIPTION:

Model CURIE-H3-5 & CURIE-H3-8 SYSTEMS Include:

- Sample Drawer
- FM-9 Smart Electronics
- Electrometer Preamp
- Power Supplies
- Ion Chamber Detector
- All Cables
- Presettable Alarm With Relay
- Manual & Preset Count Time Or Rate Mode
- On-Screen Rate Or Scaler Read-Out
- No Liquids, No Hoses, No Waste
- OPTIONAL: Lead shield around detector to reduce background



TECHNICAL ASSOCIATES

Model ~ CURIE - H3-5 ~ Model ~ CURIE - H3-8

SPECIFICATIONS:

SAMPLE:

Sample Size: 1" (26mm) Diameter, Depth to 1/4" (6mm).

Sample Holder Size: Will hold Planchet Size 20-25mm

Detector: Free Air Ion Chamber 3" diameter

Detector Wall: Nickel Plated Aluminum for Excellent Charge Collection

Window: Removable Fine Mesh Stainless Steel Grill

DISPLAY:

Display Units: User Settable: Femto amps, μCi, mCi, Curie, megaBq,

NOMINAL DISPLAY RANGE:

CURIE-H3-5: 0.1 – 10,000 milliCuries (10 Curies)

CURIE-H3-8: $0.5 \,\mu\text{Ci} - 10 \,\text{Curies}$

ELECTRONICS FM-9W:

Readout: 7" Color Monitor.

Electrometer: Solid State MOSFET input.

Electronics: A-D converter

Engineering Units: User can input correct conversion factor and change to any units.

Controls: Front Panel: On-Off, Alarm-mute, Rate, Integrate, Reset, Digital

Recessed or Internal:

See calibration.

Discriminator level, high voltage. Other adjustable settings.

Input Sensitivity: Adjustable from less than 1 millivolt to 100 millivolt

Anti-saturation and Dead-time Corrections are available.

Alarm: 2000 Hz audio tone with Audio "mute" switch + RED LIGHT

High current relay. 0-100% of full scale.

Alarm Set Point: User settable to any point on detector range.

Serial Output: Two-way USB standard, Optional: Ethernet

105-125 volts, 50-60 Hz (220 V Optional)

Construction: Gasketed aluminum case.

Cables: User Specified

ELECTRONICS FM-9W DIMENSIONS & WEIGHT:

13.5" W X 11" H X 3.6" D (25 cm x 18 cm x 10cm), excluding probe holder, feet, and knobs.

3 pounds (1.4 kg) including batteries and hardware

DETECTOR, DRAWER WEIGHT & DIMENSIONS

Detector, Drawer: 18"W x 15"H x 12"D (45.7 cm x 38 cm x 30.4 cm), **Detector, Drawer:** 12 lbs (5.4kg) Without Lead Shield **Interface:**

Warranty: 1 year





CURIE-H3-5 & CURIE-H3-8 SAMPLE COUNTER

Model ~ CURIE - H3-5 ~ Model ~ CURIE - H3-8

Accessories: Shipment includes all cables for standard operation.

OPTIONS:

Lead Shielding

• Larger Sample Size Up to 2" Diameter

Chamber Voltage Up to 1000 Volts per inch

*Note: TA also makes ion chambers that measure up to 10 million R/hr

INSTRUMENT COMPARISON FOR SURFACE MONITORING OF TRITIUM & C-14

MEASURE DIRECTLY ON SURFACES				MEASURE VIA SURFACE WIPES			
MODEL	TBM-15 D with P-15 Thin Window GM Detector	FF-27 Flat Feret Proportional Detector 100 ² Sensitive Area	FF-26 Flat Feret Proportional Detector 20 ² Sensitive Area	MODEL	SF-TF Speedy Feret Proportional Detector	SSS-22P Liquid Scintillation Counter	CURIE-H3 5 & 8
TRITIUM	NO	YES	YES	TRITIUM	YES	YES	YES
SEES H-3 AT 1000 DPM	NO	YES	YES		YES	YES	NO
SEES H-3 AT 500 DPM	NO	Not Recommended	Not Recommended		YES	YES	YES
SEES H-3 AT 100 DPM	NO	Not Recommended	Not Recommended		YES	YES	NO
SEES H-3 BELOW 100 DPM	NO	NO	NO		YES	YES	NO
CARBON-14	YES	YES	YES	CARBON- 14	YES	YES	YES
SEES C-14 AT 100 DPM	YES	YES	YES		YES	YES	YES







Model ~ CURIE - H3-5 ~ Model ~ CURIE - H3-8

SEES C-14 BELOW 100 DPM	Not Recommended	Not Recommended	Not Recommended			YES	YES	YES
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See ION CHAMBER COMPARISON CHART