

DETECTION UNITS

Models WT-A, WT-B, WT-AB Wipe Test Adaptors

The WT-A (Alpha), WT-B (Beta) and WT-AB (Alpha and Beta) are used to detect Alpha and/or Beta radiation on wipes from wipe tests. The levels are then measured with Pylon's AB-5.



WT-A

Applications:

- Ideal for wipe tests
- Area surveys
- Area scanning
- Radon surveys

Features:

- Easy to use
- Reads out alpha, beta, or alpha and beta surface contamination
- Very small
- Handy
- Lightweight
- Manufactured to a nominal counting efficiency
- Accepts standard commercial wipes

Theory of Operation:

The detector assembly mounts directly on the PMT tube housing on the AB-5 front panel. The wipe is then placed in the assembly and read.

This method allows the user to quickly measure radioactive particles on the surface of the wipe which, in turn, quickly and easily locates contamination in the area.

WT-A / WT-B / WT-AB

DETECTION UNITS

Specifications:

	<u>WT-A</u>	<u>WT-B</u>	<u>WT-AB</u>	
Radiation Detected:	Alpha	Beta	Alpha & Beta	
Scintillator - Alpha:	ZnS(Ag)		ZnS(Ag)	
Scintillator - Beta:		Plastic	Plastic	
		Type BC400	Type BC400	
Energy Ranges - Alpha:	4.5 to 9		4.5 to 9	MeV
Energy Ranges - Beta:		0.1 to 3	0.1 to 3	MeV
LAD ¹ - Alpha:	2.08		2.08	dpm
LAD ¹ - Beta:		115.38	115.38	dpm
Efficiency - Alpha:	24		24	%
Efficiency - Beta:		13	13	%
Accuracy - Alpha ² :	± 5		± 5	%
Accuracy - Beta ² :		± 5	± 5	%
Active Surface Area:	15.7 (2.43)	15.7 (2.43)	15.7 (2.43)	cm ² (in ²)
Detector Background	< 0.5	< 15	< 15	cpm
Calibration ³ :	Single Point	Single Point	Single Point	
Light Shield	Aluminized Mylar	Aluminum	Aluminized Mylar	
Operating Temperature Range:	0 to +50 (+32 to +122)	0 to +50 (+32 to +122)	0 to +50 (+32 to +122)	°C (°F)
Storage Temperature Range:	-20 to +75 (-4 to +167)	-20 to +75 (-4 to +167)	-20 to +75 (-4 to +167)	°C (°F)
Relative Humidity Range ⁴ :	0 to 90	0 to 90	0 to 90	%
Diameter:	8 (3.15)	8 (3.15)	8 (3.15)	cm (in)
Height:	5 (2)	5 (2)	5 (2)	cm (in)
Weight:	210 (0.46)	210 (0.46)	210 (0.46)	g (lb)

¹ Lowest Activity Detectable.

² At a 2 σ Confidence Level.

³ Custom Calibrations Available. Custom calibrations include multi-point calibrations and calibrations at non standard activity levels.

⁴ Non-Condensing.

- Values are nominal.
- Specifications are based on new units which have been appropriately calibrated.
- Alpha Efficiency refers to an Am241 point source in the wipe position.
- Beta Efficiency refers to a Sr90/Y90 point source in the wipe position.

Ordering Information:

<i>Model</i>	<i>Part Number</i>	<i>Description</i>
WT-A	A201650	Wipe test alpha detector assembly
WT-B	6201622	Wipe test beta detector assembly
WT-AB	6201623	Wipe test alpha/beta detector assembly

Specifications subject to change without notice.

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