



TRIAD TECHNOLOGY INC.

Spectroscopy Solutions

**ANTI-REFLECTION COATED
REFERENCE CELLS**



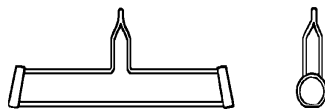
Physical Dimensions

25mm Quartz Cell:



Cell Diameter:	25mm
Fill Stem:	<10mm
Window Aperture:	20mm
Window Angle:	0°
Window Type:	Flat
Window Thickness:	3mm
Window Surface	60 – 40
Quality:	Scratch & Dig

11mm Wedge Window Quartz Cell:



Cell Diameter:	11mm
Fill Stem:	< 10mm
Window Aperture:	7mm
Window Angle:	12°
Window Type:	Wedge 2°
Window Thickness:	2mm
Window Surface	60 – 40
Quality:	Scratch & Dig



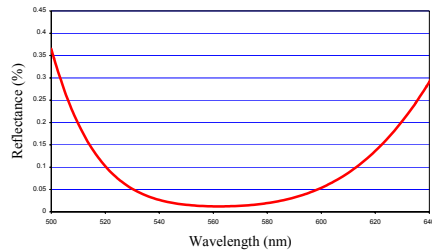
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TECHNICAL and ORDERING INFORMATION

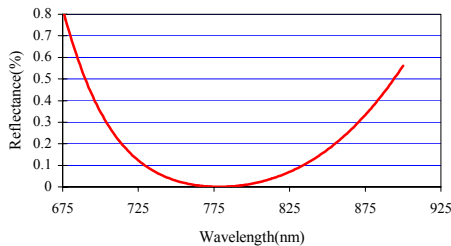
Triad Technology offers a number of our standard vapor cells with anti-reflection coated windows. Our coated reference cells are manufactured with an anti-reflection coating on both window surfaces to minimize optical losses. The anti-reflection coating reflectance graphs for several wavelengths are shown below. If you have a vapor cell requirement that is not listed, please call or email us.

REFLECTANCE VS WAVELENGTH
Anti-reflection Coating centered at 560nm



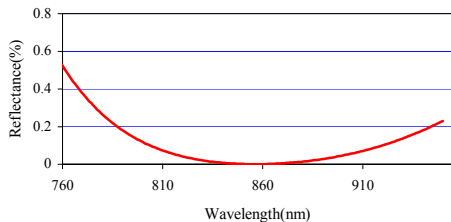
The anti-reflection coating centered a 532nm has a wavelength range from 500 to 600nm with a reflectance of less than 0.1%. The anti-reflection coating provides a high-quality coating for our Iodine and Sodium Cell.

REFLECTANCE VS WAVELENGTH
Anti-reflection Coating centered at 780nm



The anti-reflection coating centered at 780nm has a wavelength range from 730 to 830nm with a reflectance of less than 0.1%. The anti-reflection coating provides high-quality coating for our Rubidium (Natural, Isotopes 85 and 87) and Potassium cells.

REFLECTANCE VS WAVELENGTH
Anti-reflection Coating centered at 852nm



The anti-reflection coating centered at 852nm has a wavelength range from 805 to 910nm with a reflectance of less than 0.1%. The anti-reflection coating provides a high-quality coating for our Cesium cell.

Part Number

Fill Material

Standard Cell

TT-RB-75-V-Q-CW	Rubidium Rb	25 x 75mm
TT-RB85-75-V-Q-CW	Rubidium Rb85	25 x 75mm
TT-RB87-75-V-Q-CW	Rubidium Rb87	25 x 75mm
TT-CS-75-V-Q-CW	Cesium Cs	25 x 75mm
TT-NA-75-V-Q-CW	Sodium Na	25 x 75mm
TT-K-75-V-Q-CW	Potassium K	25 x 75mm
TT-I-100-V-Q-CW	Iodine I ²	25 x 100mm



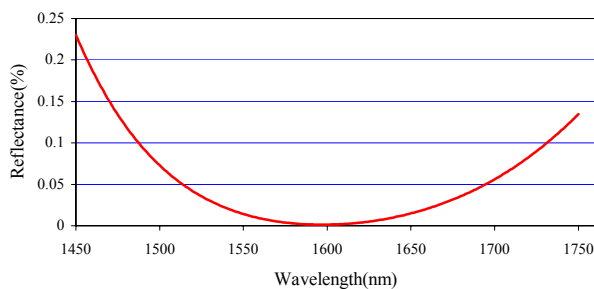
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TECHNICAL and ORDERING INFORMATION

Several of our standard gas cells are available with anti-reflection coated windows. The gas cells are configured as stand alone cells or packaged in a fiber-coupled housing. The anti-reflection coated gas cells are Acetylene (Isotope 12 and 13), Hydrogen Cyanide (Isotope 12 and 13), Carbon Monoxide (Isotope 12 and 13), Ethane, Ethylene and Methane. All gases used in manufacturing have a purity level of greater than 99%. All cells are tested to ensure purity and correct gas pressure. Cells with gas mixtures are also possible. If you have a gas cell requirement that is not listed, please call or email us.

REFLECTANCE VS WAVELENGTH
Antireflection Coating centered at 1600nm



The anti-reflection coating graph has a wavelength range from 1500 to 1740nm with a reflectance of less than 01%. The anti-reflection coating provides a high-quality coating for gases having absorption in this wavelength

Part Number	Vapor/Gas Type	Standard Cell	Pressure
TT-CH12-50-G-CW	Acetylene $^{12}\text{C}_2\text{H}_2$	11 x 50mm	50 Torr.
TT-CH13-50-G-CW	Acetylene $^{13}\text{C}_2\text{H}_2$	11 x 50mm	50 Torr.
TT-HCN12-100-G-CW	Hydrogen Cyanide $\text{H}^{12}\text{C}^{14}\text{N}$	11 x 75mm	100 Torr.
TT-HCN13-100-G-CW	Hydrogen Cyanide $\text{H}^{13}\text{C}^{14}\text{N}$	11 x 75mm	100 Torr.
TT-CO12-600-G-CW	Carbon Monoxide $^{12}\text{C}^{16}\text{O}$	11 x 100mm	600 Torr.
TT-CO13-600-G-CW	Carbon Monoxide $^{13}\text{C}^{16}\text{O}$	11 x 100mm	600 Torr.
TT-CH4-200-G-CW	Methane CH_4	11 x 75mm	200 Torr.
TT-C2H6-200-G-CW	Ethane C_2H_6	11 x 75mm	200 Torr.
TT-C2H4-200-G-CW	Ethylene C_2H_4	11x 75mm	200 Torr.