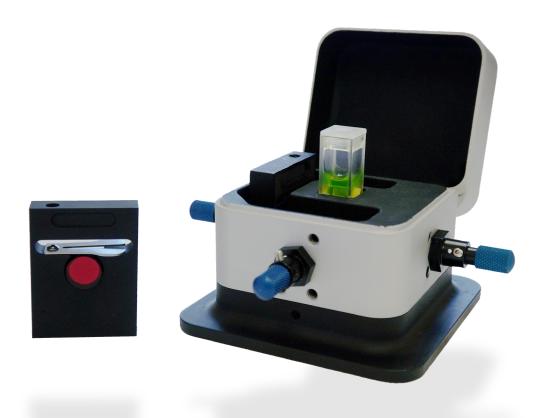


## SQUARE ONE Cuvette Holder

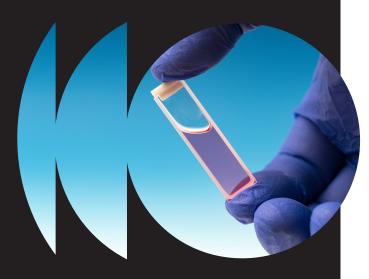


## Sample Holder Ensures Accurate, Repeatable Measurements

SQUARE ONE is a robust, easily manageable cuvette holder for highly accurate, repeatable absorbance and fluorescence measurements. The holder accommodates 1 cm pathlength cuvettes, has an integrated cover to reduce ambient light, and provides a snug, reliable fit for cuvettes and filters to ensure best results.

SQUARE ONE (item SQ1-ALL) has a built-in mirror to optimize signal reflection for fluorescence, and two filter slots that accept both 12.5 mm and 25 mm diameter optical filters. With filters, users can manage fluorescence excitation and emission wavelengths or remove unneeded wavelengths to reduce stray light.





## At a Glance

Collimating lenses: Three fused silica lenses

(200-2000 nm)

Fiber optic termination: SMA 905

Dimensions: 111 mm x 90 mm x 74 mm

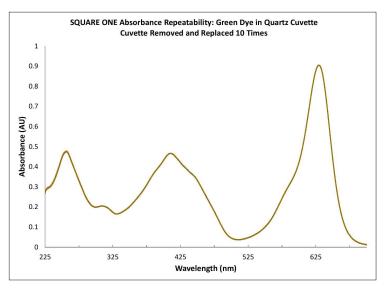
Weight: 618 g
Pathlength: 1 cm
Z dimension: 15 mm

**Filter slot:** Two slots; each slot accepts 12.5 mm and 25 mm diameter filters

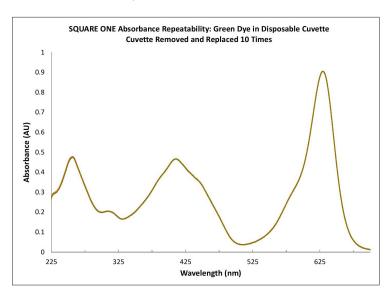
**Fluorescence accessories:** Mirror screw plug (74-MSP) to increase signal collection; Teflon diffuser (CVD-DIFFUSE) to direct light at 90°

## Absorbance Repeatability with SQUARE ONE Cuvette Holder

Accurate absorbance data requires a well-engineered cuvette holder that enables users to remove and replace cuvettes repeatably. With SQUARE ONE, cuvettes are held snugly without damaging the delicate cuvette optical surfaces. Inserting the cuvette into the cuvette holder provides the user with tactile feedback that the cuvette is held securely. SQUARE ONE provides repeatable data with both quartz and plastic disposable cuvettes.



SQUARE ONE spectral repeatability when a quartz cuvette containing diluted green food dye is removed and replaced in the cuvette holder 10 times. The spectra overlay almost perfectly, with an average absorbance of 0.47 AU at 410 nm with standard deviation of just 0.0007 AU.



SQUARE ONE spectral repeatability when a disposable cuvette containing a concentrated green food dye is removed and replaced in the cuvette holder 10 times. Even with disposable cuvettes, the spectra overlay almost perfectly, with an average absorbance of 0.47 AU at 410 nm with standard deviation of just 0.0008 AU.

