



# PRESIDIUM<sup>®</sup>

PGCG Software (Mac)

**User Guide**



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# 1. Using PGCG Software

The PGCG Software has the same functionality as the PGCG unit with extended coverage of more gemstones. The functions are as follows:

- Weight Estimator
- Gemstone Estimator
- Specific Gravity (S.G.) Dictionary
- Report

A top navigation bar is provided in the software for you to navigate to the functions mentioned above.

## 1.1. Decimal Separator

The software will adapt to the decimal separator used in different countries which can be either a period (.) or a comma (,). Please use the supported decimal separator according to the system language of your computer.

## 1.2. Connecting the PGCG Unit

**Step 1:** Connect the PGCG Unit to your PC via the USB cable that comes in the package. Make sure that the device is turned on and displays the message “USB Connected”.



Figure 1

**Step 2:** Click “Connect” to establish the connection between the PGCG unit and PC. If the display shows other readings other than 0.00 after connecting, press the “C” button on the PGCG unit to zero it.

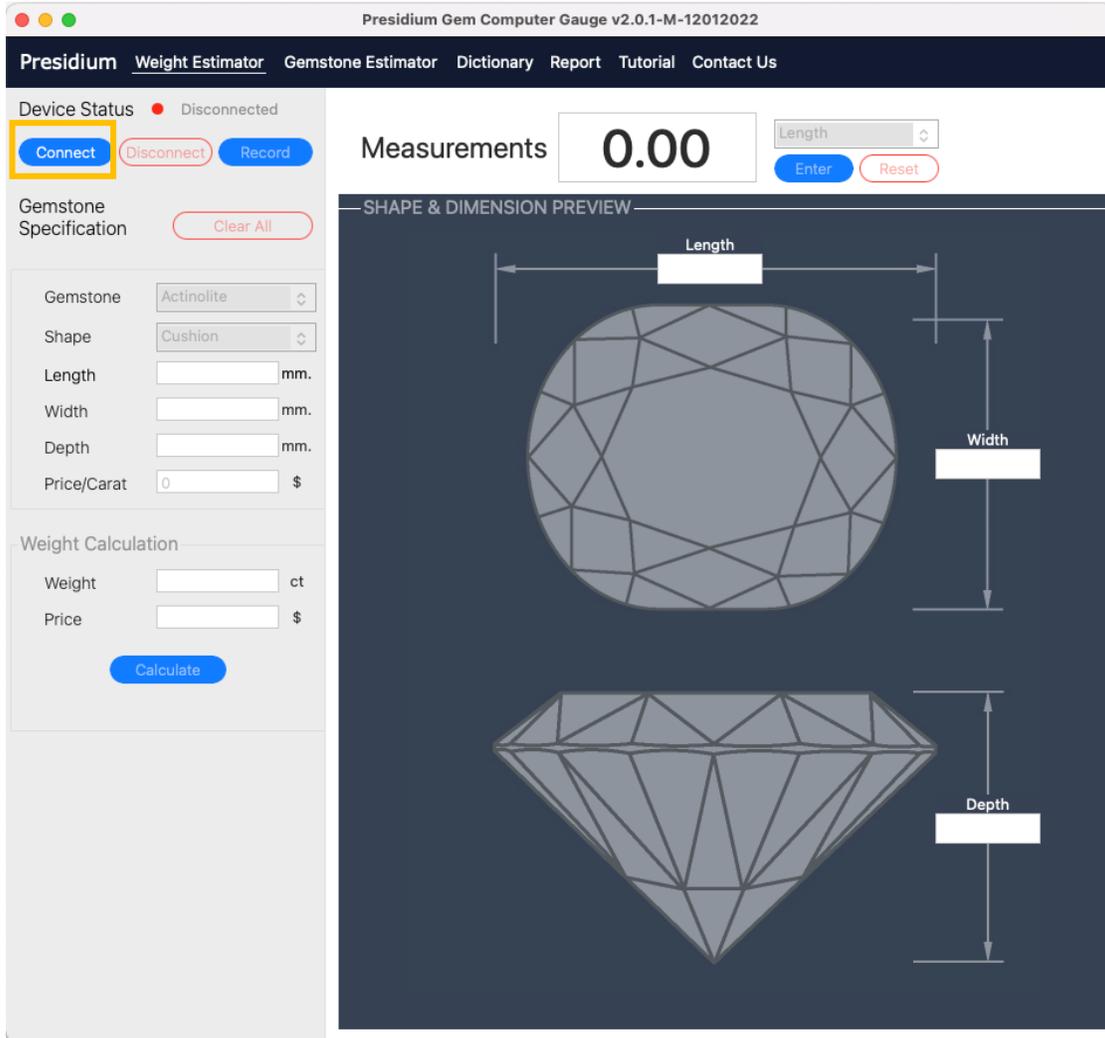


Figure 2

### 1.3. Weight Estimator

The weight estimator is used to estimate the weight and value of the gemstone based on the gemstone specifications such as shape and dimensions.

The weight estimator function is divided into five sections.

Section	Name	Description
A	USB Interface	To establish a connection between the PGCG unit and PC
B	Gemstone Specification	Select the gemstone and shape to enable the required fields to be filled in
C	Weight Calculation	Display the estimated weight and price of the gemstone based on the input from the Gemstone Specification Section
D	Measurement	Detect and display the reading from the PGCG unit in real-time
E	Shape & Dimension Preview	Display the values entered in the Gemstone Specification section

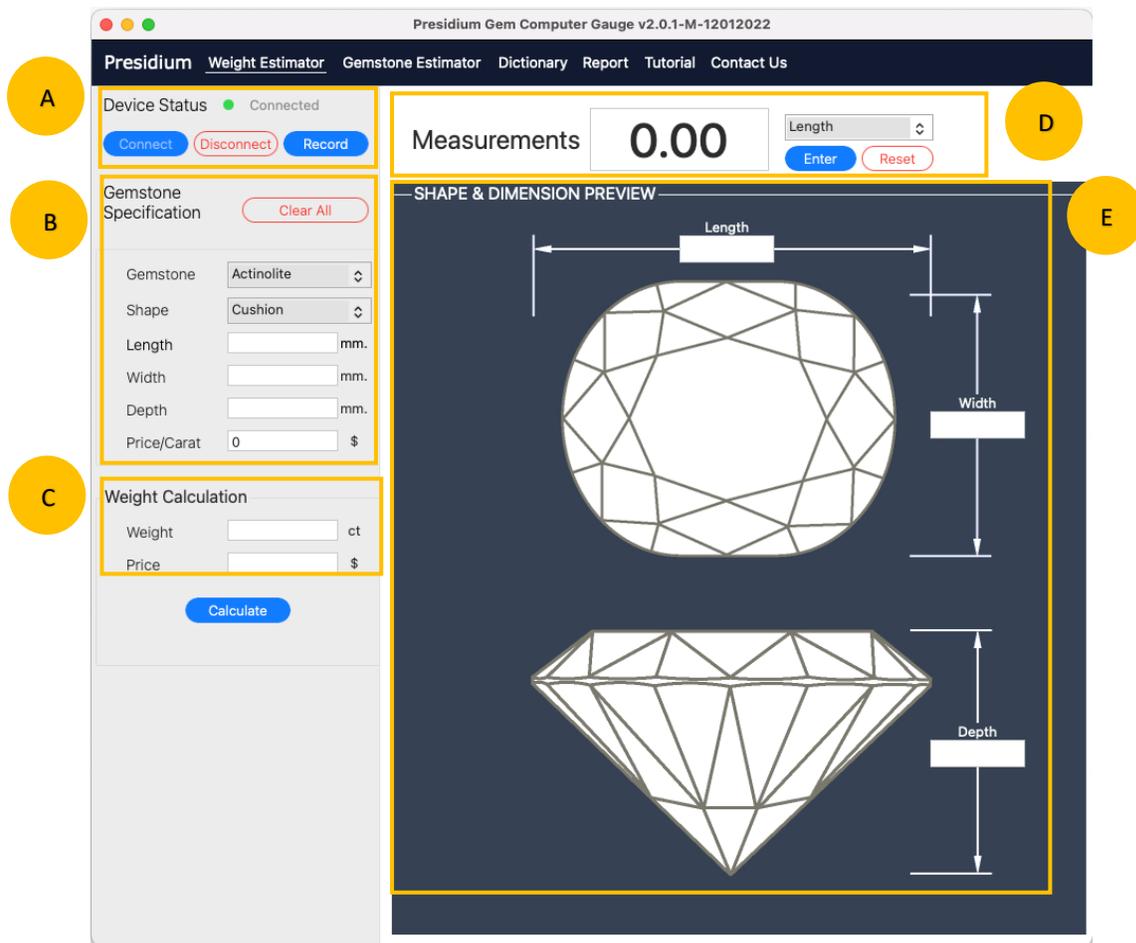


Figure 3

### 1.3.1. Using the Weight Estimator Function

**Step 1:** Choose a gemstone from the drop-down menu displayed in alphabetical order.

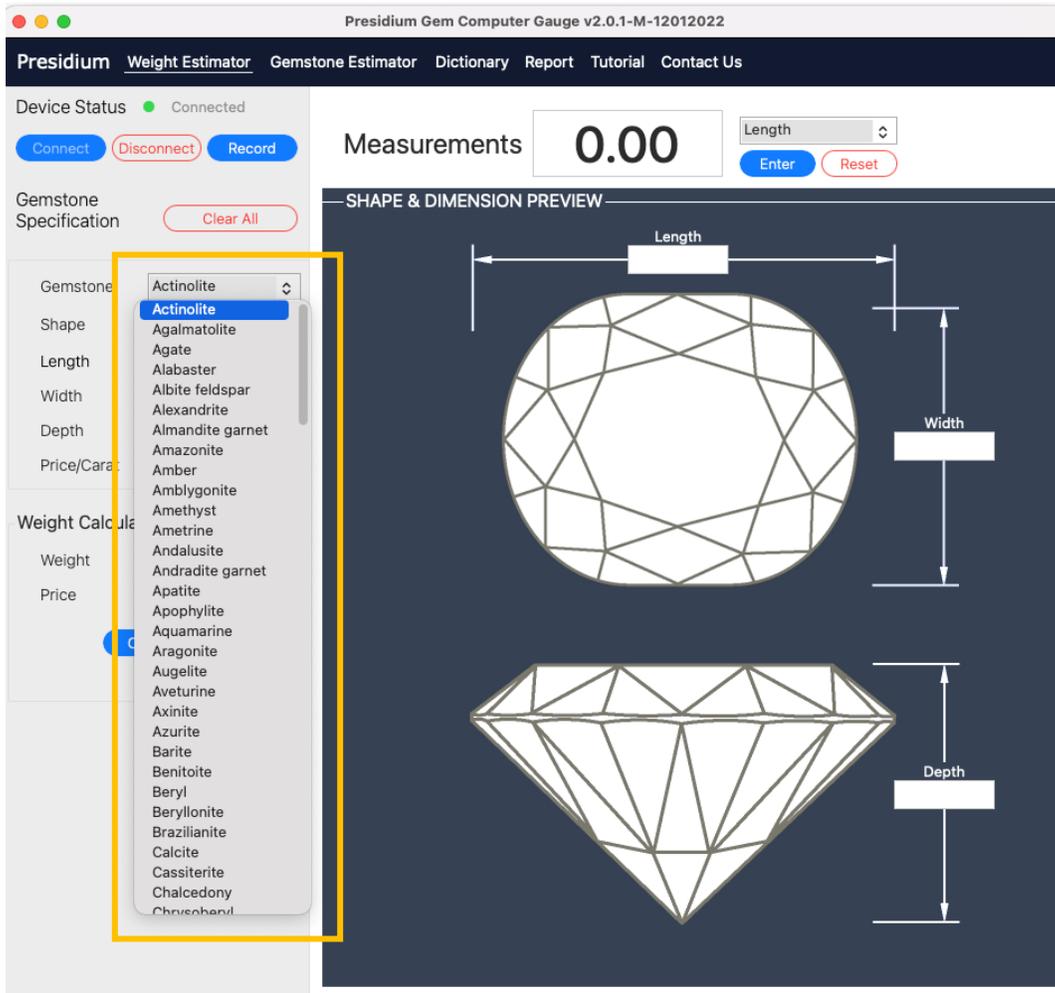


Figure 4

Step 2: Next, choose the shape of the gemstone from the drop-down menu.

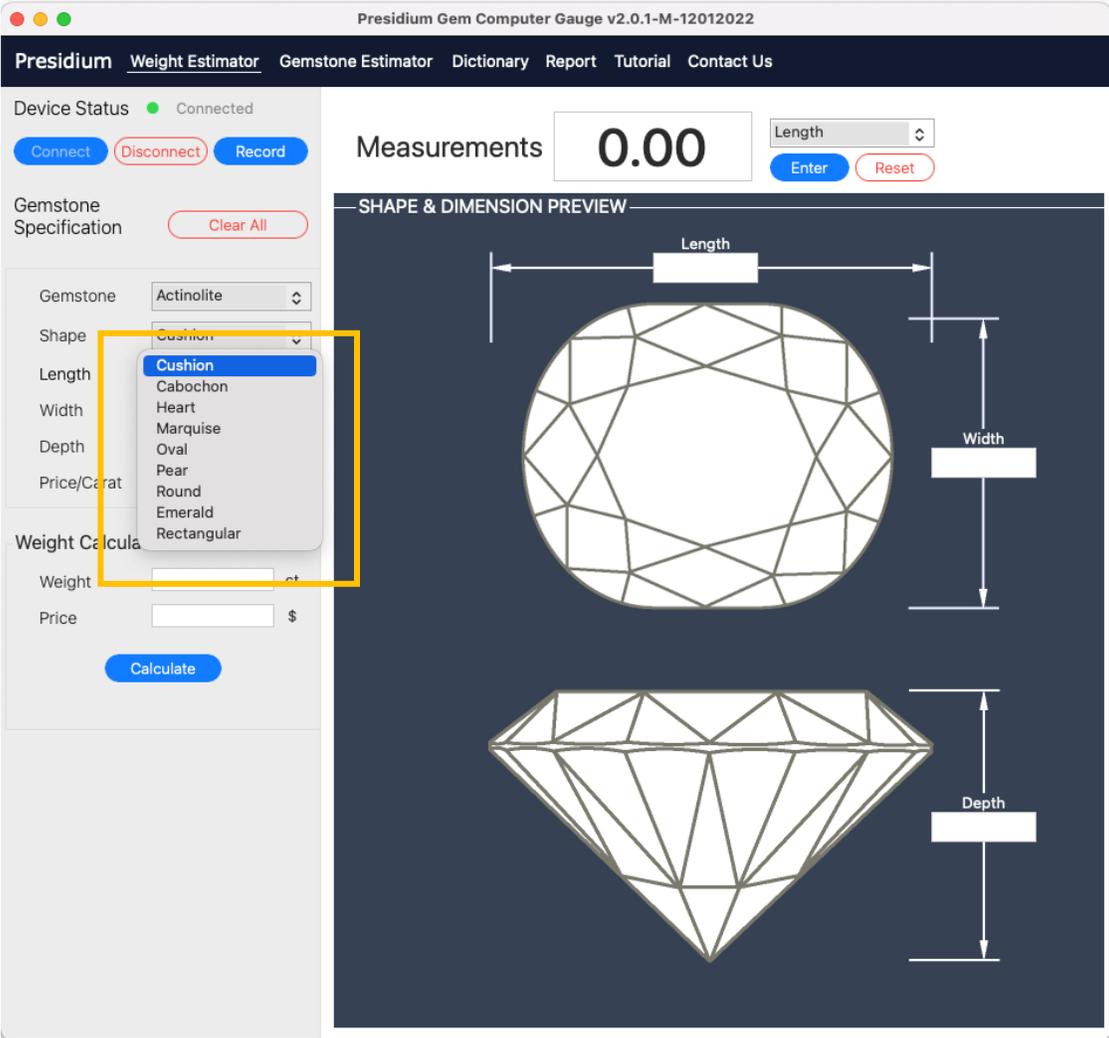


Figure 5

**Step 3:** As you select a shape, the required input fields for the dimensions will be enabled and the shape will appear in the Shape & Dimension Preview section accordingly. You may refer to the preview to see how the dimensions are measured for each shape.

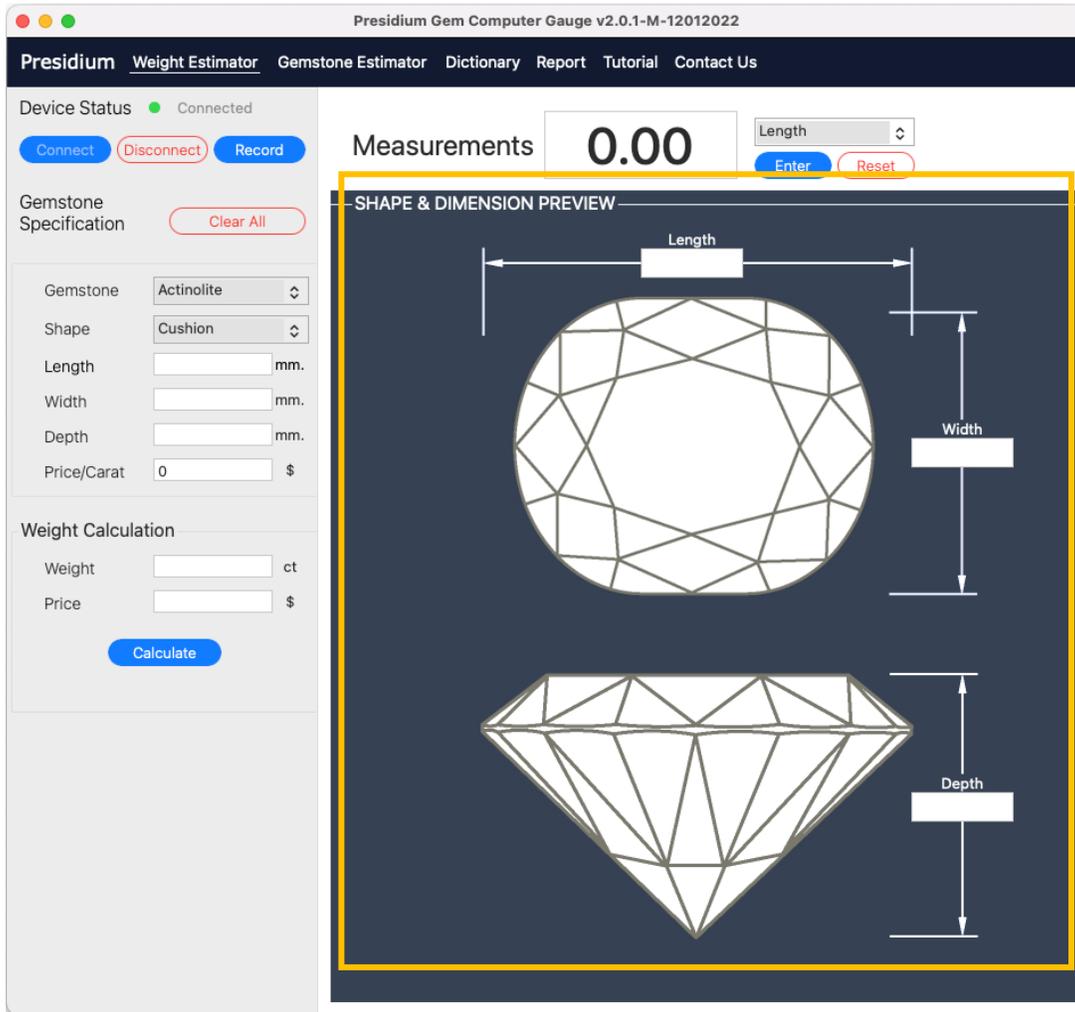


Figure 6

**Step 4:** Referring to Figure 7, fill in the required fields by entering the numbers manually or utilizing the measurement section to get the reading from the PGCG unit. Refer to [section 2.2.2](#) on how to use the measurement section.

**Step 5:** Once you are done, click “Calculate” to view the estimated weight in the Weight Calculation section.

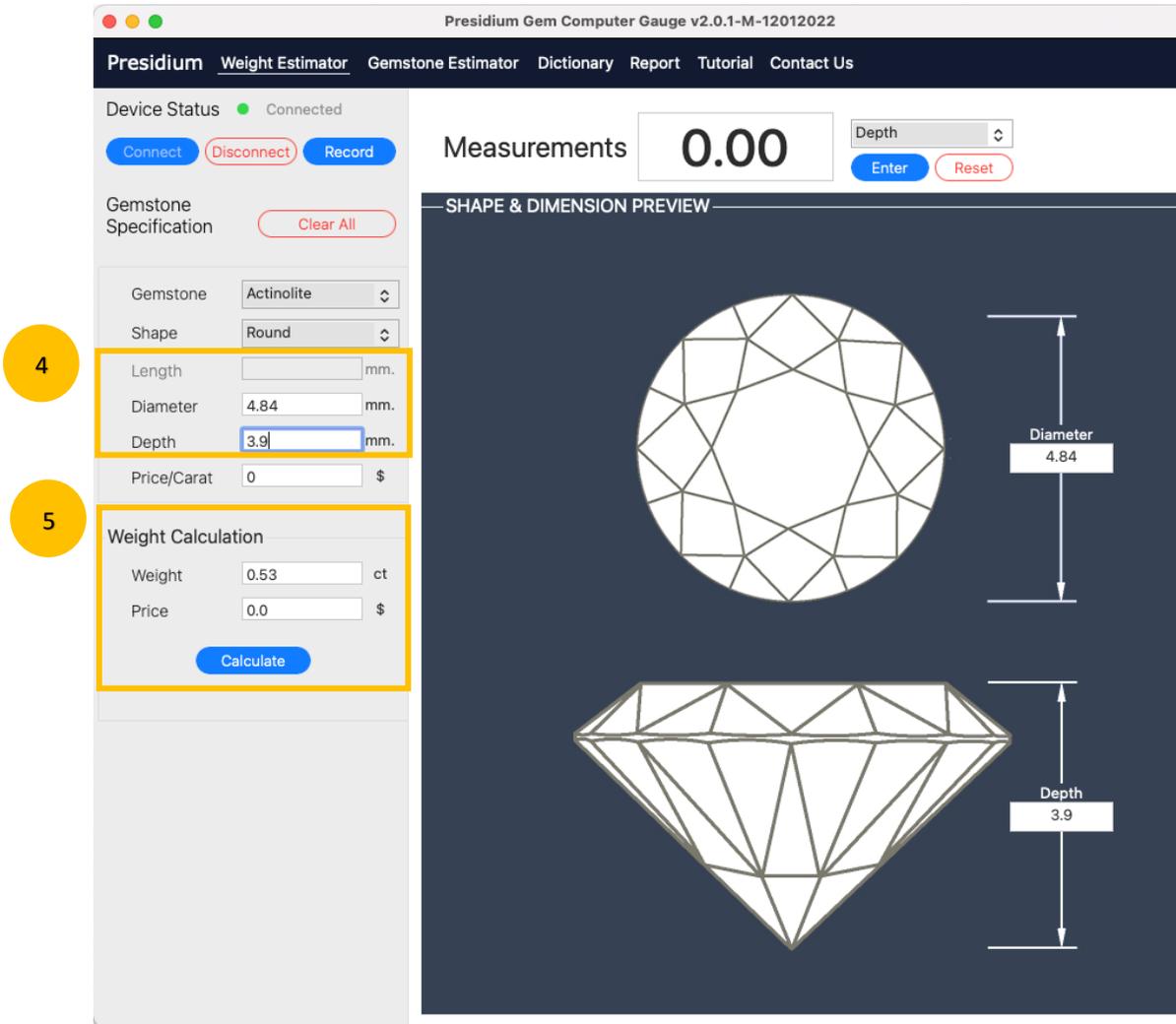


Figure 7

**Step 6:** If you wish to estimate the price of the gemstone, enter a number in the price/carat field and click “Calculate” again to see its value in the Weight Calculation section.

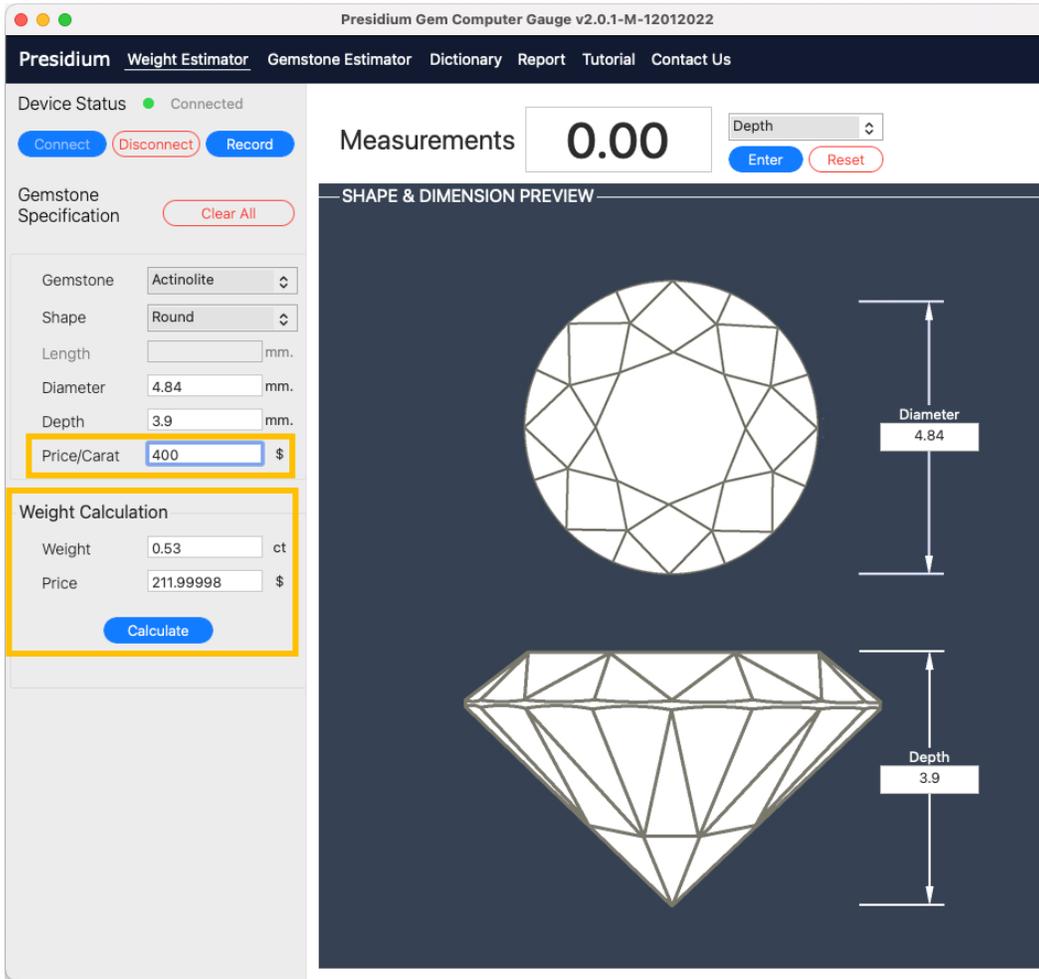


Figure 8

After completing your estimation, you may click “Clear All” to restart the process.

### 1.3.2. Measuring with the PGCG unit

**Step 1:** Ensure that the reading is not showing other values other than 0.00. If not, press the “C” on the PGCG unit or the “reset” button in the software for zeroing.



Figure 9

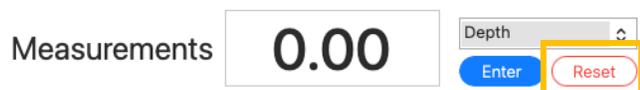


Figure 10

**Step 2:** Select the dimension to measure from the drop-down list located on the right side of the reading. The dimension in this menu corresponds to the shape that you are measuring for.

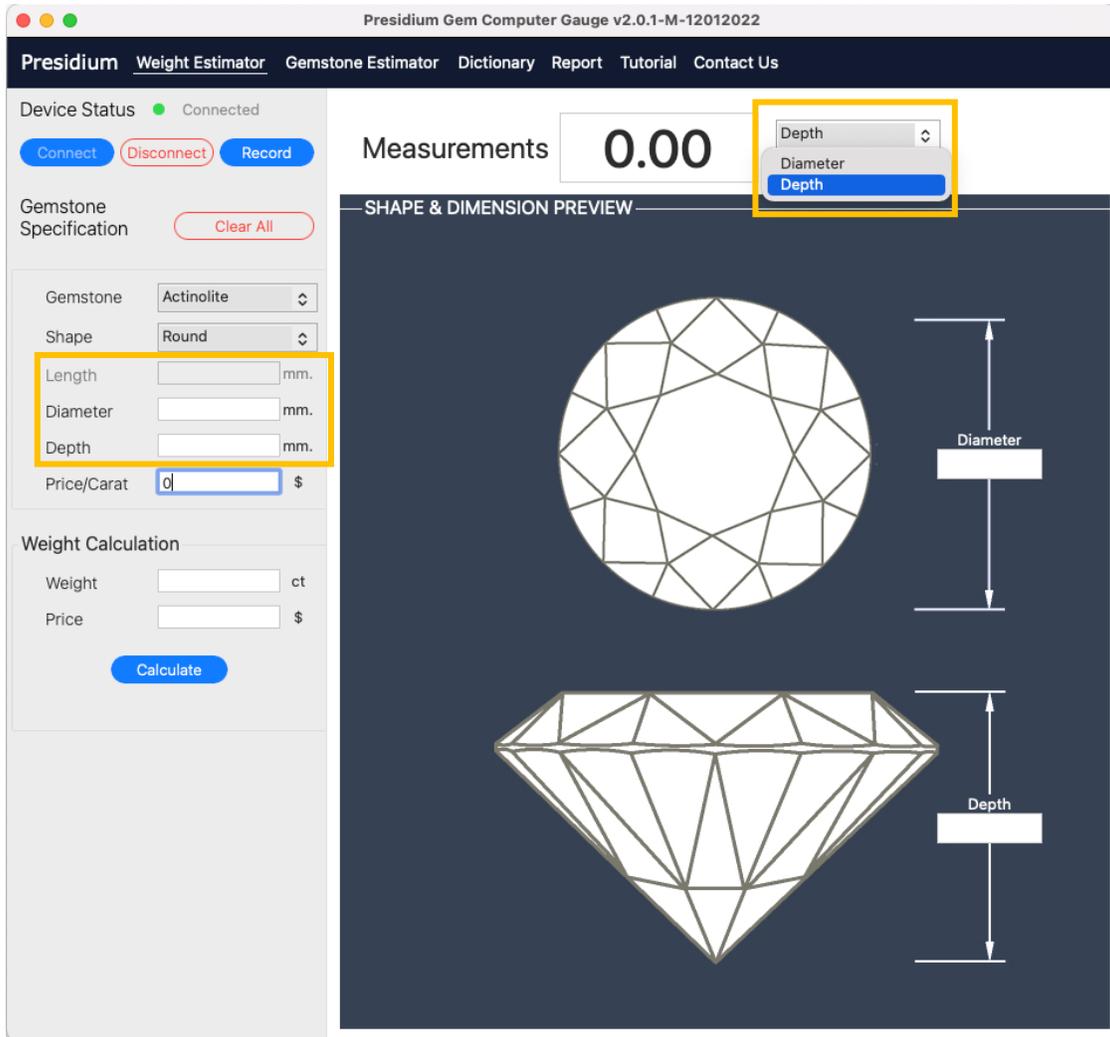


Figure 11

**Step 3:** Place the gemstone on the PGCG unit according to the dimension you want to measure

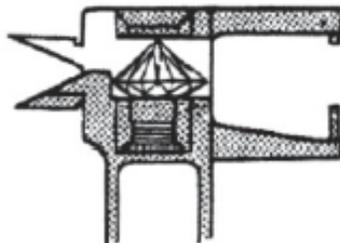


Figure 12

**Step 4:** Click “Enter” to confirm the measurement. The value will be displayed in the field and the Shape & Dimension Preview as well.

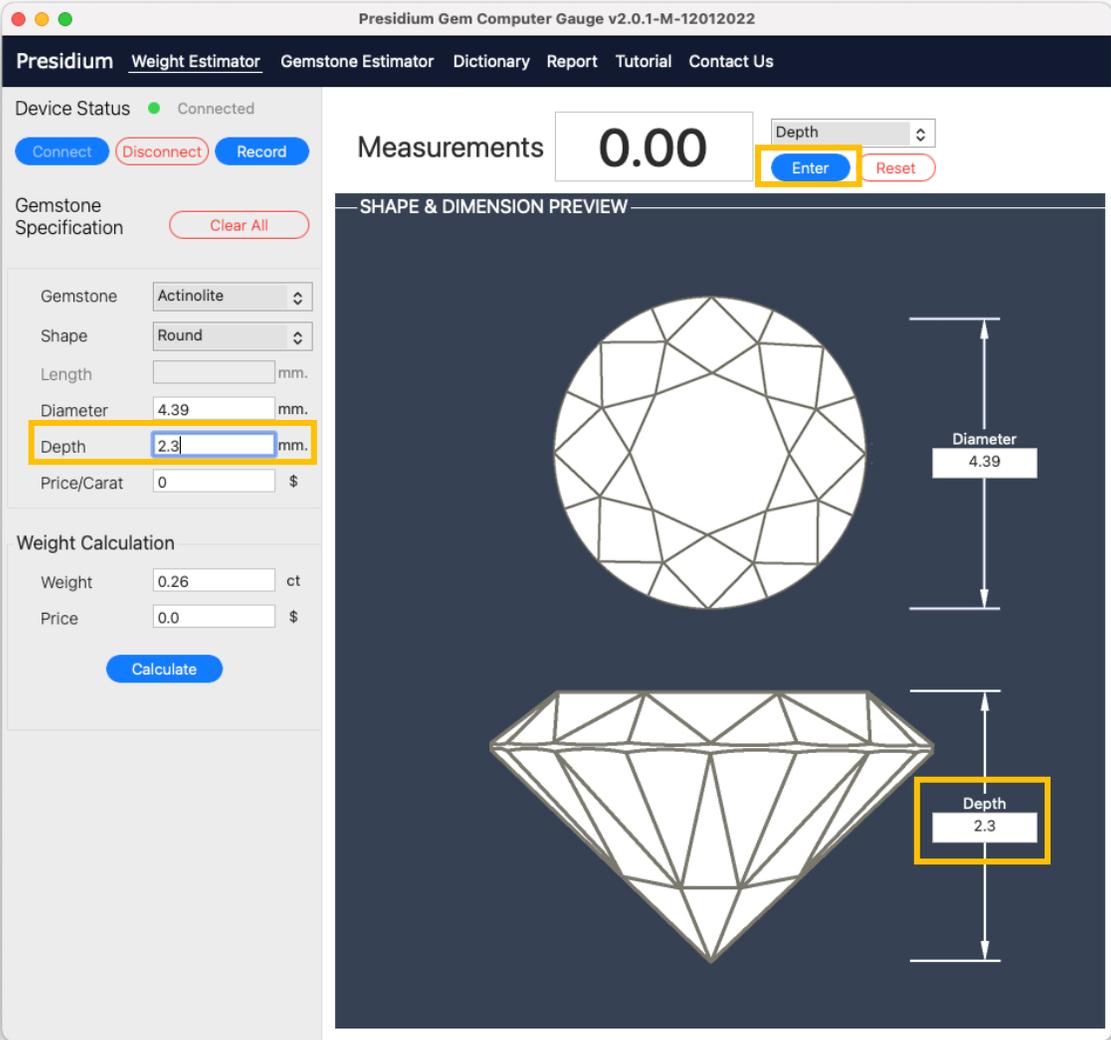


Figure 13

**Step 5:** Repeat steps 2 to 4 to fill in the rest of the required dimensions

## 1.4. Gemstone Estimator

As gemstones have similar sizes and shapes, the gemstone estimator is used to identify the possible stones based on the calculated Specific Gravity (S.G.) property from the dimensions provided.

### 1.4.1. Using the Gemstone Estimator Function

**Step 1:** Choose a shape from the drop-down menu.

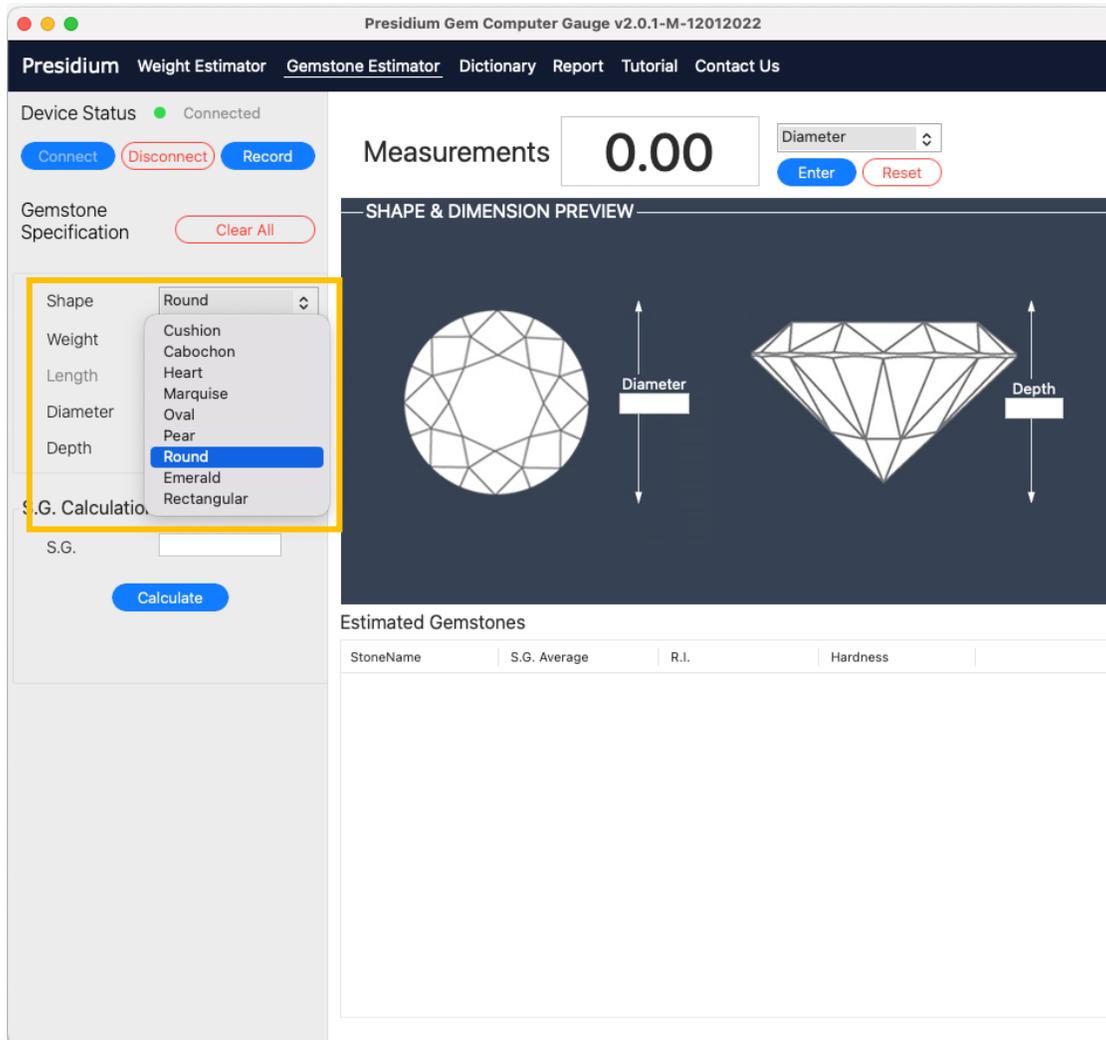


Figure 14

**Step 2:** Fill in the required dimensions and weight value. This step is the same as the weight estimator function section. If you still need help with measuring using the PGCG unit, refer to [section 2.2.2](#)

**Step 3:** Click “Calculate” to see the S.G. value at the S.G. Calculation section and a list of possible stones will appear in the Estimated Gemstones section simultaneously.

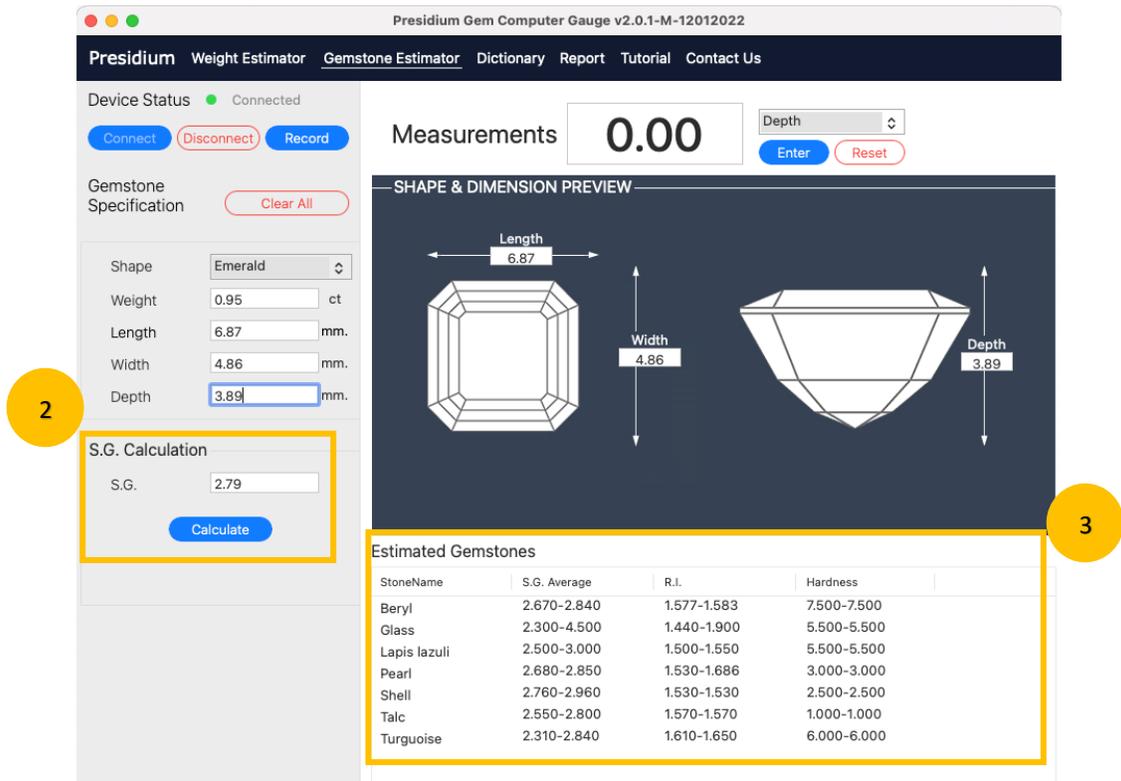


Figure 15

If the calculated S.G. value does not match any of the gemstones in the database, a dialog box will appear displaying “Not Found in Record”.

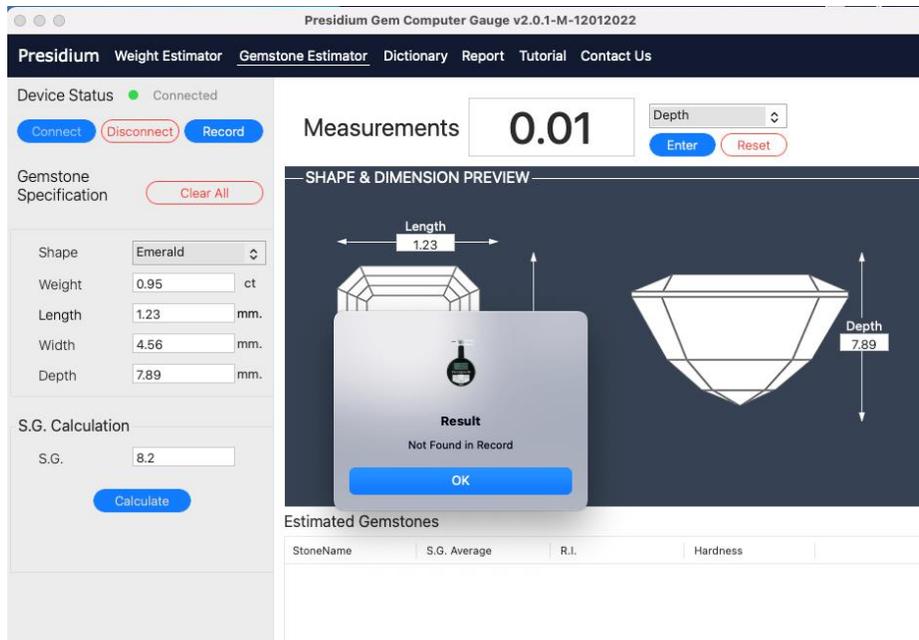


Figure 16

## 1.5. Specific Gravity (S.G.) Dictionary

The S.G. Dictionary displays the gemstones database and can be used to look for specific gemstones by filtering.

Filtering of the gemstone database can be done in four different methods:

- a) Gemstone name
- b) The S.G. value
- c) The Refractive Index (R.I.) value
- d) The Hardness values

### 1.5.1. Using the S.G. Dictionary

**Step 1:** Choose the filtering method (Name, S.G., R.I., Hardness) from the drop-down menu.

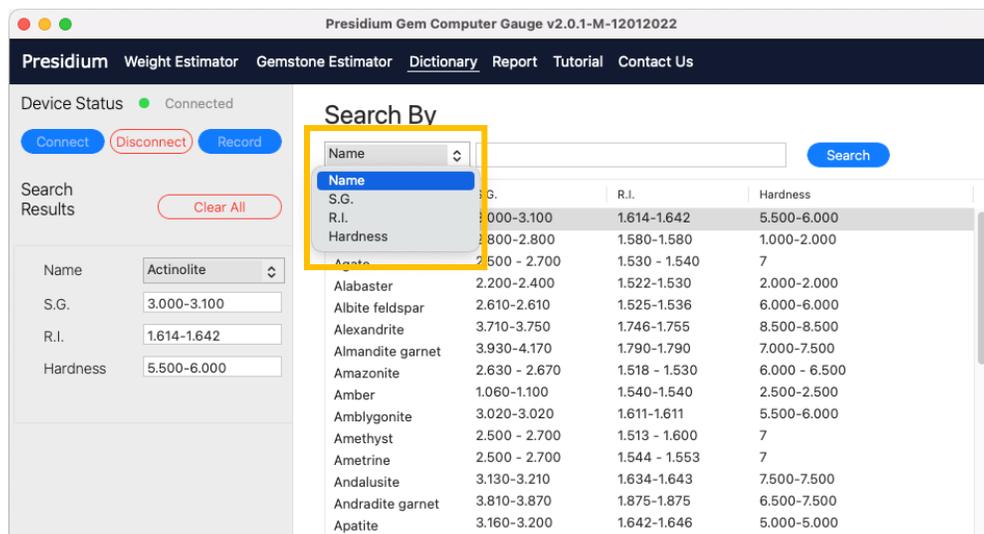


Figure 17

**Step 2:** Enter the value according to the chosen filter and click “Search” to see the filtered results.

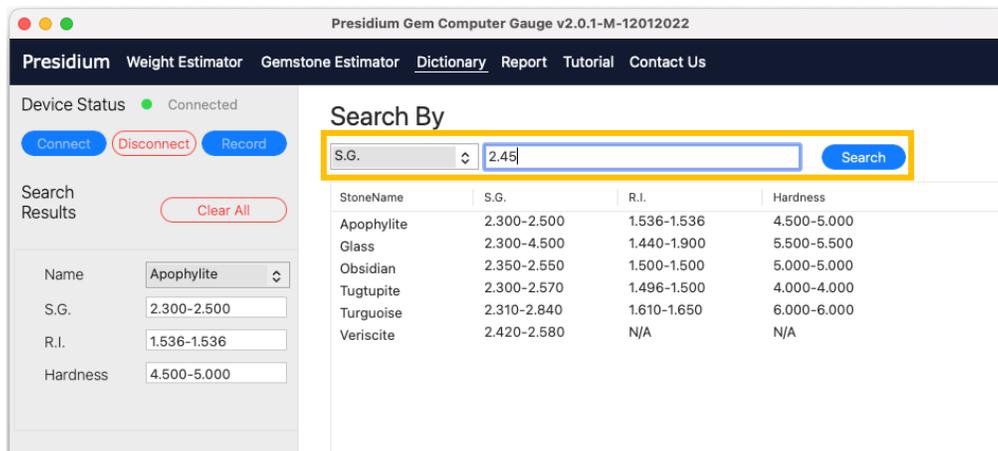


Figure 18

## 1.6. Report

In the report function, it has the following features:

- a) Load and view report
- b) Create a new report
- c) Manage data in the report
- d) Save the report as an Excel file
- e) Print out a hardcopy of the report
- f) View the report in Excel

### 1.6.1. Using the Report Function

#### 1.6.1.1. Load and View Report

**Step1:** Click “Open” and browse for the report that has been saved previously



*Figure 19*

**Step 2:** The report will be loaded and can be viewed in the table

#### 1.6.1.2. Create a new report

**Step 1:** Click “New” to clear your previous data and start a new report



*Figure 20*

### 1.6.1.3. Manage data in the Report

#### a) Add data into the report

**Step 1:** Choose the gemstone and shape from their respective drop-down menu and fill in the required dimensions. This step is the same as the weight estimator function.

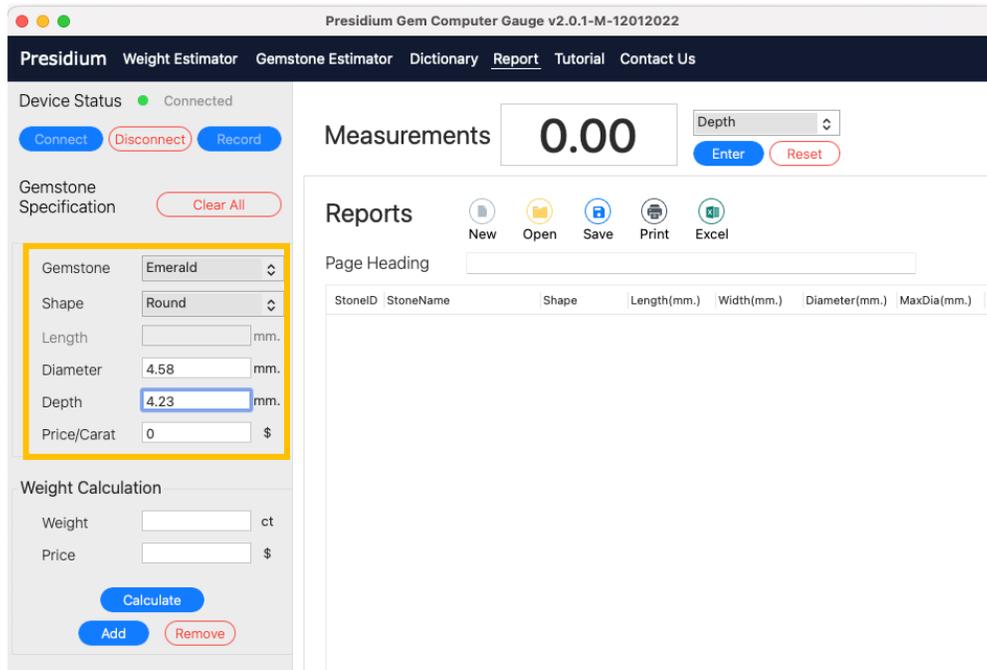


Figure 21

**Step 3:** Click “Calculate” to get the results in the Weight Calculation section.

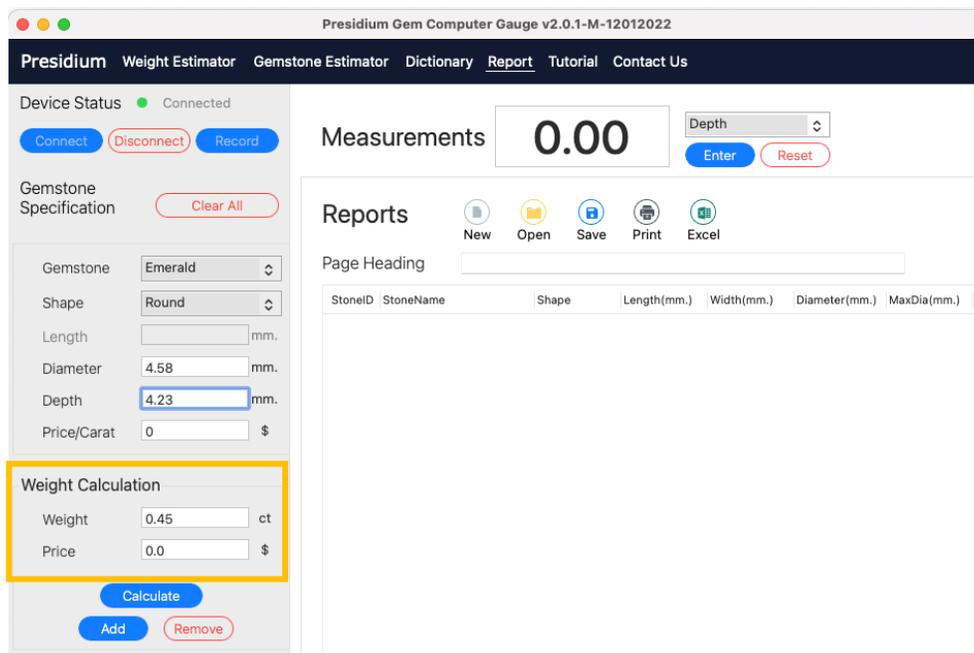


Figure 22

**Step 4:** Once done, click “Add” and the data will be displayed in the report table.

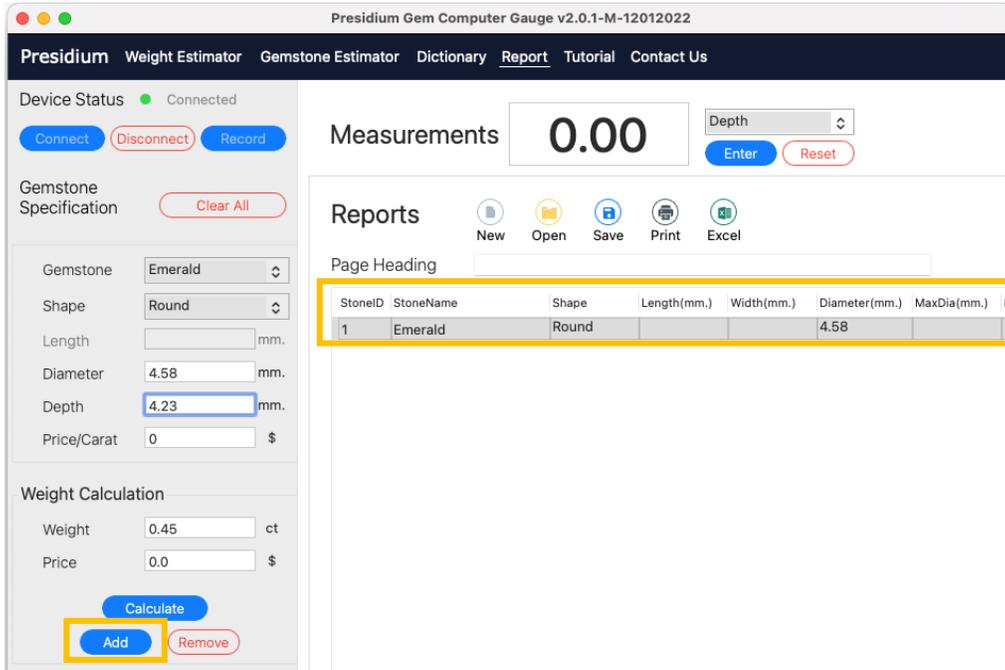


Figure 23

b) Remove data from the report

**Step 1:** Select the data to be removed from the report table.

**Step 2:** Click “Remove” and the data in the corresponding row will be removed.

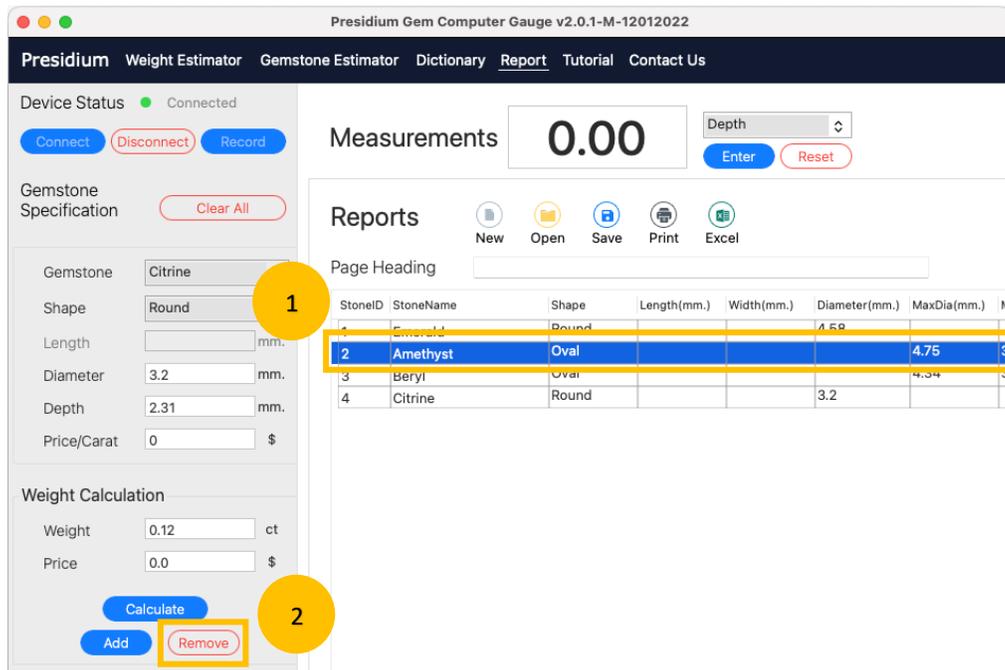


Figure 24

#### 1.6.1.4. Save the Report

**Step 1:** After modifying the report, click “Save” to save the report onto your PC.



Figure 25

**Step 2:** Enter a file name and browse the preferred location for the report to be saved. Then, the report will be saved locally to your PC as a CSV file.

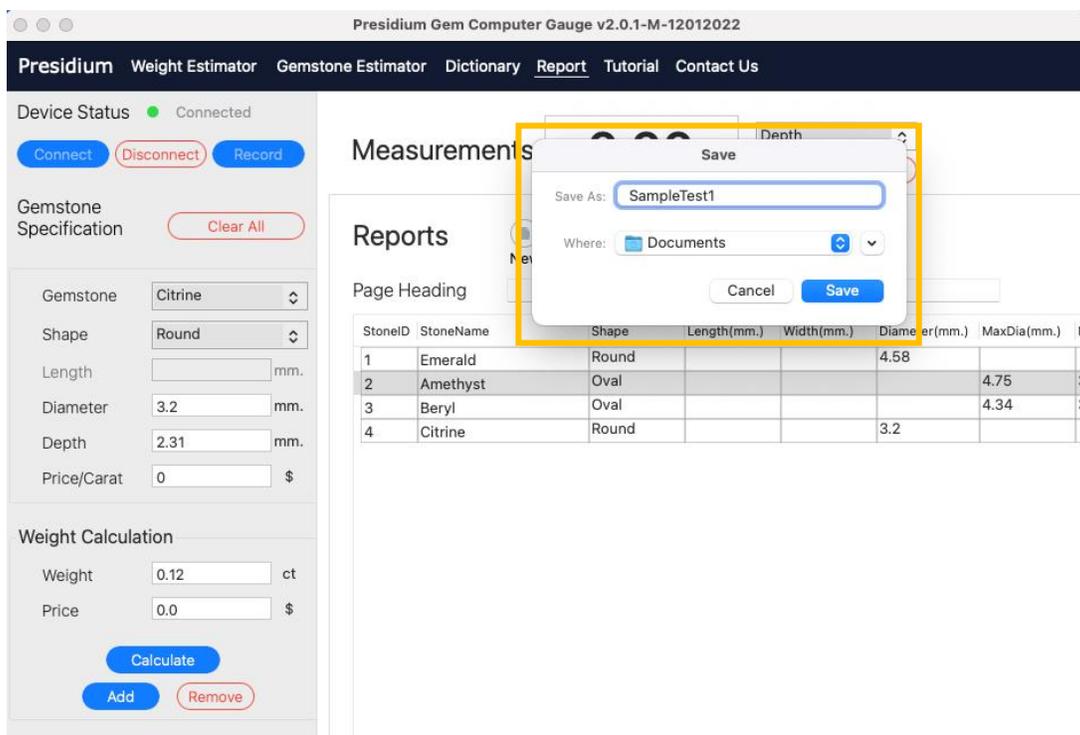


Figure 26

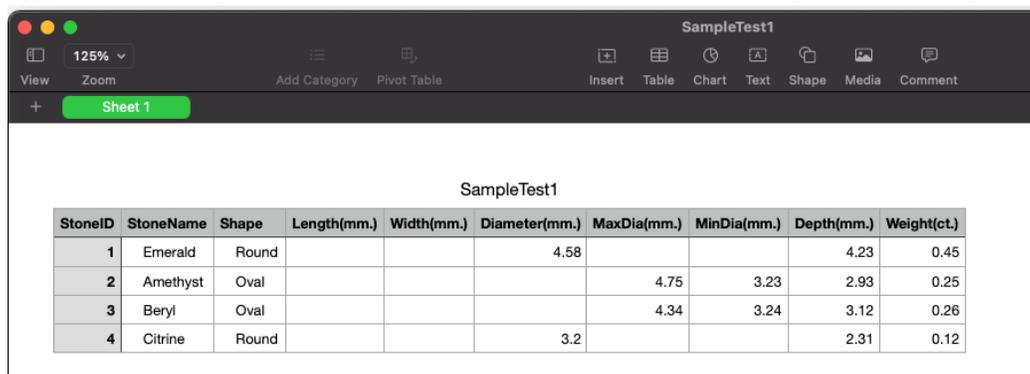


Figure 27

### 1.6.1.5. Print the Report

**Step 1:** Enter a page heading and click “Print” to print a hard copy of the report.

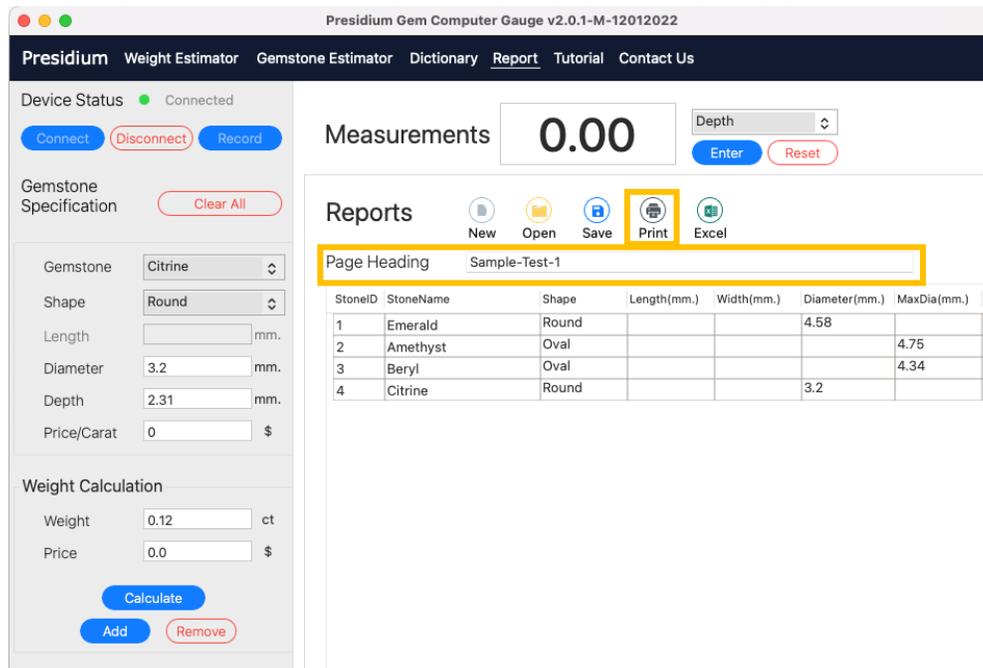


Figure 28

**Step 2:** Choose the preferred settings in the Page Setup such as paper size and orientation. A preview is available for you to see the page layout. Once you are done, click “Print” to start printing

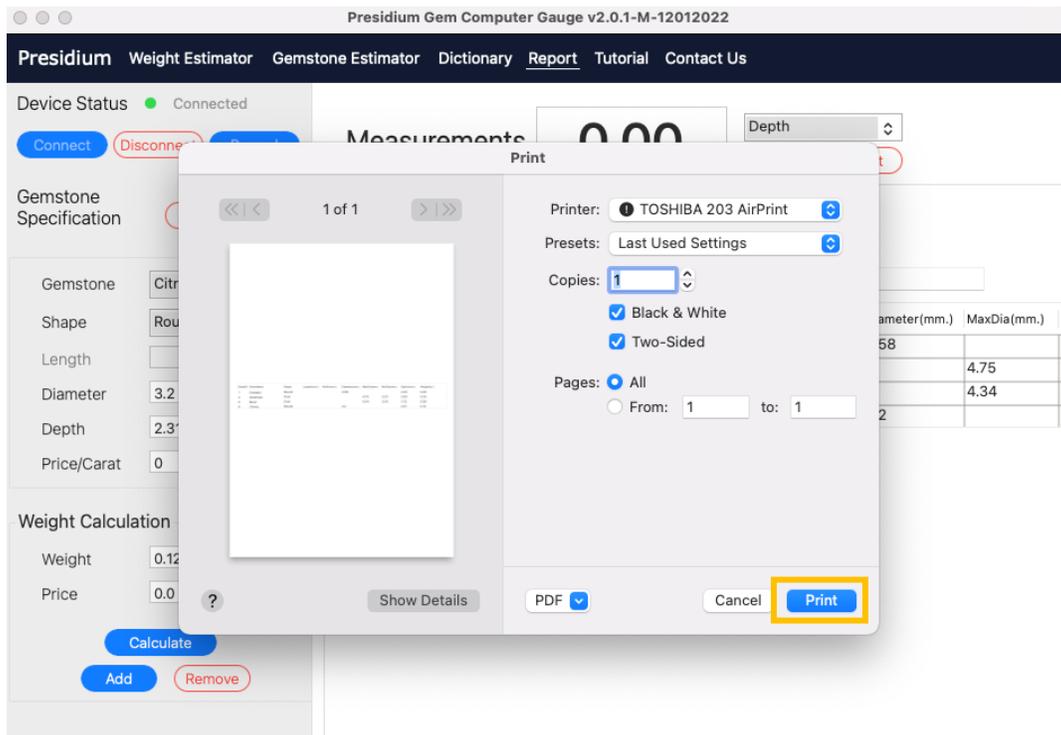


Figure 29

1.6.1.6. View Report in Excel

**Step 1:** After adding data into the report, click “Excel” to view the report in an Excel file. You may make additional modifications to the report in excel and save a copy.



Figure 30

The screenshot shows an Excel spreadsheet with a table containing the following data:

StoneID	StoneName	Shape	Length(mm.)	Width(mm.)	Diameter(mi MaxDia(mm)	MinDia(mm)	Depth(mm.)	Weight(ct.)
1	Emerald	Round			4.58		4.23	0.45
2	Amethyst	Oval			4.75	3.23	2.93	0.25
3	Beryl	Oval			4.34	3.24	3.12	0.26
4	Citrine	Round			3.2		2.31	0.12

Figure 31

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