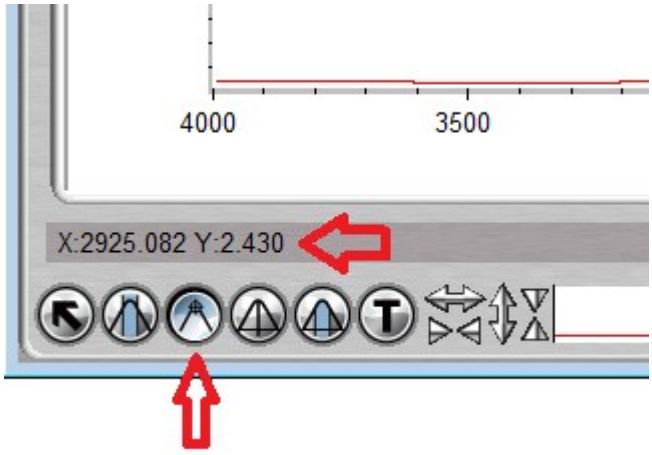
ATR Accessory Performance Test

1. Remove the accessory from the sample compartment. Click OK when OMNIC prompts that the accessory has been removed. OMNIC will load the default.exp experiment file.
2. If there is a spectrum opened, click on the Window menu and select “New Window”
3. Click on Collect menu and select “Experiment Setup”, and set the following parameters:
   Collect Tab
   Number of Scans = 10
   Resolution = 4
   Final Format = % Transmittance
   Select “Collect Background after” 0 “minutes”
4. Click Ok to close the Experiment Setup window
5. Collect a Background. When prompted, click “No” to not add to the window.
6. Reinsert the smart accessory. When prompted by OMNIC that an accessory has been inserted, click **Cancel.** This will ensure that the experiment settings stay the same.
7. Collect a Sample. When prompted select Yes to add the spectra to the current window.
8. Select the Spectral Cursor tool in the lower left hand corner of the OMNIC window.



9. Click on the spectrum window at 2000 cm-1. For Diamond crystals, click at 1000 cm-1
10. In the lower left corner (just above the spectral cursor tool) you will see and X and Y value listed. The Y value is the % Transmittance at the currently select position of the spectrum (2000 cm-1). Compare this value to the listed specification for your Smart accessory and crystal type. If you do not know the listed specification, contact technical support.
11. Remove and Reinsert the accessory and click Ok to reload the proper experiment file for the accessory.

Note:

- The factory communication (IR6118 Diamond ATR Smart iTR accessory) specifies the anticipated throughput of 30% at 1000 cm^{-1} for a diamond crystal.
- Horizon ATR has 24% throughput at 2000 cm^{-1}.
- Seagull ATR has 30% throughput at 2000 cm^{-1}.
- Praying Mantis ATR has 60% throughput at 2000 cm^{-1}.
- If the % transmittance measured is very low or significantly less than the published throughput, there is a good indication that that the crystal is damaged.