

Smart OMNI-Transmission™

For Transmission Analysis

The Thermo Scientific Smart OMNI-Transmission is ideal when you need to make fast and accurate measurements of liquids, solids, or gases that are mounted in cells or cell holders and mounts. The Smart OMNI-Transmission optimizes the ease and speed with which basic transmission measurements are made. The accessory features one step, snap-in-place installation and automatically seals the sample compartment with its Quick-Purge™ feature. This capability drastically reduces the length of time between sample analyses and is extremely advantageous when analyzing a large number of samples in succession. Purging the sample environment during infrared analysis eliminates atmospheric water vapor and carbon dioxide that can obscure peaks of interest and complicate spectral subtractions. Typically, purging the main instrument sample compartment without a Smart Accessory can take up to five times longer to reach environmental equilibrium than with the Smart OMNI-Transmission accessory. The accessory has an enclosed design which is chemically resistant and will protect the instrument from contamination and spillage.

Example Applications

- Liquids, solids, or gases that are mounted in cells or cell holders and mounts
- Corrosive and caustic samples

Unique Features

The Smart OMNI-Transmission integrates several optimized features to make transmission measurements easier and even more precise. The sturdy construction of the enclosed system protects the user and spectrometer from chemical and environmental damage. When using corrosive or caustic materials, the Smart OMNI-Transmission accessory protects the spectrometer from potential accidental spillage.

To obtain faster results and higher quality spectral information, the Smart OMNI-Transmission accessory should be used to enhance transmission infrared analyses. The Quick-Purge feature dramatically decreases the time necessary between samples. With the Smart OMNI-Transmission accessory it takes two minutes or less to

reach environmental equilibrium, while with the standard sample compartment holder it can take up to 11 minutes. The Quick-Purge feature eliminates atmospheric water vapor and carbon dioxide that can obscure peaks of interest and complicate spectral subtractions. Once a cell has been placed in the sample card/cell holder tray, a plastic insert can be installed to complete the purge features.

The Smart OMNI-Transmission accessory has sample positions that accommodate most KBr Pellet holders, Precision Pathlength liquid cells, infrared cards, film holders, gas cells and many other transmission tools. Each position is for optimizing the IR beam focus through different cells.



Specifications

Time to Reach Environmental Equilibrium: Two minutes or less

Purge Volume: Approximately 24 cubic inches

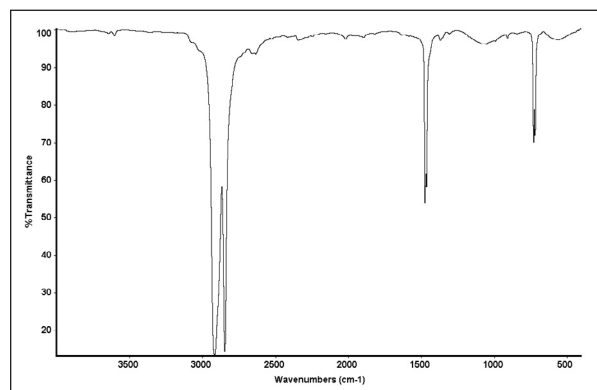
Sample Positions: From left to right for optimizing the beam focus through transmission cards and cells

Maximum Cell Size: 100 millimeters

Ordering Information

Accessory	Part Number
Smart OMNI-Transmission	0028-1XX

XX = 99 for Nicolet™ iS™ 10 and Nicolet x700 XX = 99 for Nicolet Nexus™
XX = 97 for Nicolet 380 and Avatar™



25 micrometer polyethylene film collected using the Smart OMNI-Transmission