

Falcon Mid-IR Transmission Accessory – For Precise Temperature Control of Demountable Liquid Cells



FEATURES

- Peltier temperature control from 5 to 130 °C
- Wide selection of windows for optimizing spectral range and sample compatibility
- Flexible pathlength to control sample absorbance
- Demountable cell design for easy cleaning of difficult samples
- Available for most FTIR spectrometers

The PIKE Technologies Falcon Mid-IR Transmission Accessory is recommended for qualitative and quantitative analysis of liquids and protein solutions where it is necessary to control the temperature of the sample. Temperature range of the accessory is 5 to 130 °C with +/- 0.5% accuracy. Heating and cooling is controlled by a built-in Peltier device providing for reproducible ramping and for reaching target temperatures quickly and reliably. The system is driven by a digital temperature controller – directly or via PC.

A wide variety of window types and spacer pathlengths are available for this product. Window options cover NIR, mid-IR and far-IR spectral regions and sample compositions from organic to aqueous. A complete transmission cell for use with the Falcon Mid-IR Accessory consists of two 32 x 3 mm size windows (drilled and undrilled), an assorted spacer set, the needle plate with Luer-Lok fittings, two gaskets and a proprietary cell mount.

PIKE Technologies offers temperature controllers with digital and PC programmable set points with TempPRO software (sold separately). This allows for easily programmed temperature profiles and unattended data collection with most FTIR software platforms. The full Falcon configuration requires the accessory base with cell holder, user selected windows, and one of the available temperature controllers. The Falcon accessory is compatible with most brands of FTIR spectrometers.



PIKE TempPRO software for kinetic experiments.

SPECIFICATIONS

Temperature Control	Peltier (cooling and heating)
Temperature Range	5 to 130 °C
Accuracy	+/- 0.5% of set point
Sensor Type	3 wire Pt RTD (low drift, high stability)
Dimensions (W x D x H)	89 x 121 x 83 mm (without FTIR baseplate and mount)
Temperature Controller	Touch-panel display with USB interface. PIKE TempPRO software (sold separately) for PC control with unlimited ramps and automated data collection.
Input	100–240 VAC, auto setting, external power supply
Output	16 VDC/150 W maximum

Notes: Peltier device must be water cooled for proper operation – this is achieved by running cold tap water through the water jacket integrated into the accessory shell, or by the use of an external liquid circulator.

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
111-40XX	Falcon Mid-IR Base with Cell Holder <i>Includes temperature-controlled base, demountable cell, gaskets and one complete set of spacers. Select digital temperature controller (below) and windows (next page)</i>

Notes: Replace XX with your spectrometer's Instrument Code listed on page 164. Please select 2 syringes (next page) for filling the demountable liquid cell.

TEMPERATURE CONTROLLERS (must select one)

PART NUMBER	DESCRIPTION
076-1510	Digital Temperature Control Module for Falcon Accessory
007-0207	PIKE TempPRO Software

Notes: Digital Temperature Control Module is required to control temperature. PIKE TempPRO software is sold separately.

LIQUID RECIRCULATOR

PART NUMBER	DESCRIPTION
170-1100	Liquid Recirculator