PIKE TECHNOLOGIES

# UV-Vis Accessories

PIKE is addressing the growing need for more sophisticated UV-Vis accessories by featuring research-style specular reflectance accessories, polarizers and automated sampling stages. We also include a selection of most commonly used UV-Vis cuvettes and cuvette holders. Please contact us to discuss customized options.

**UV-Vis Cuvettes, Cells, Vials, Holders**

**Peltier-Controlled Cuvette Holders**
*For Experiments Under Tightly Controlled Temperature Conditions*

**Falcon UV-Vis**
Precise Cell Temperature Control Accessory

**UV-Vis DiffusIR™**
Diffuse Reflectance Accessory

**UV-Vis Polarizers**
Manual and Automated

**UV-Vis Spec**
Slide Mounted Specular Reflectance Accessories

**UV-Vis 10Spec and 85Spec**
Fixed Angle Specular Reflectance Accessories

**UV-Vis VeeMAX™**
Variable Angle Specular Reflectance Accessory

**Automated R-Theta Stages**
*For UV-Vis Spectrophotometers*

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# UV-Vis Cuvettes, Cells, Vials and Holders

PIKE Technologies offers a selection of the most popular cuvettes, vials and cell holders used in the field of UV-Vis spectrophotometry. The cuvettes are manufactured using a heat fusing method which ensures that they are fused into a single homogeneous unit. Cuvettes are carefully annealed to remove any residual strain for maximum cell integrity and physical strength.

The cells can be used with most solvents and acidic solutions. Hydrofluoric acid (HF) and strong bases (pH >9) will negatively affect the cell surfaces.

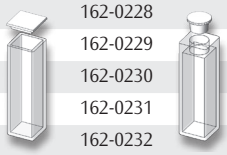
## Specifications

| | |
|---|---|
| **Window Thickness** | 1.25 mm |
| **Beam Height (Z-dimension)** | 8.5 mm and 11 mm |
| **Optical Glass Spectral Range** | 334 to 2500 nm |
| **Far UV Quartz Spectral Range** | 170 to 2700 nm |
| **NIR Quartz Spectral Range** | 220 to 3800 nm |

## Ordering Information

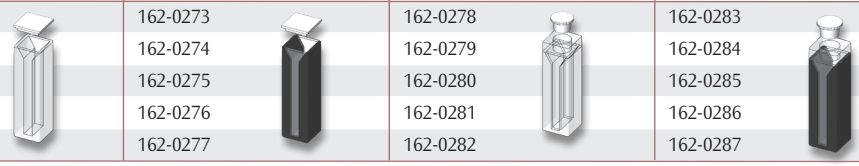
### Standard Rectangular Cuvettes

| Pathlength mm | Volume mL | Optical Glass (334–2500 nm) With PTFE Cover Part Number | Optical Glass (334–2500 nm) With PTFE Stopper Part Number | Far UV Quartz (170–2700 nm) With PTFE Cover Part Number | Far UV Quartz (170–2700 nm) With PTFE Stopper Part Number | NIR Quartz (220–3800 nm) With PTFE Cover Part Number | NIR Quartz (220–3800 nm) With PTFE Stopper Part Number |
|---|---|---|---|---|---|---|---|
| 1 | 0.40 | 162-0220 | 162-0228 | 162-0236 | 162-0244 | 162-0252 | 162-0260 |
| 2 | 0.70 | 162-0221 | 162-0229 | 162-0237 | 162-0245 | 162-0253 | 162-0261 |
| 5 | 1.70 | 162-0222 | 162-0230 | 162-0238 | 162-0246 | 162-0254 | 162-0262 |
| 10 | 3.50 | 162-0223 | 162-0231 | 162-0239 | 162-0247 | 162-0255 | 162-0263 |
| 20 | 7.00 | 162-0224 | 162-0232 | 162-0240 | 162-0248 | 162-0256 | 162-0264 |
| 40 | 14.00 | 162-0225 | 162-0233 | 162-0241 | 162-0249 | 162-0257 | 162-0265 |
| 50 | 17.50 | 162-0226 | 162-0234 | 162-0242 | 162-0250 | 162-0258 | 162-0266 |
| 100 | 35.00 | 162-0227 | 162-0235 | 162-0243 | 162-0251 | 162-0259 | 162-0267 |



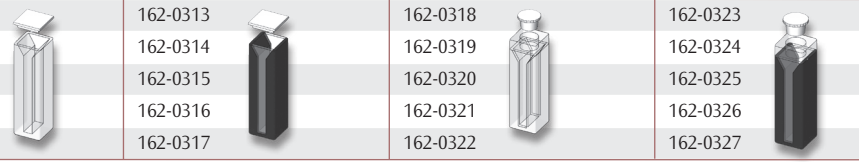
### Semi-Micro Rectangular Cuvettes – 4-mm Opening

| Pathlength mm | Volume mL | With PTFE Cover/Clear Part Number | With PTFE Cover/Black Walled Part Number | With PTFE Stopper/Clear Part Number | With PTFE Stopper/Black Walled Part Number |
|---|---|---|---|---|---|
| **Optical Glass (320–2500 nm)** | | | | | |
| 5 | 0.70 | 162-0268 | 162-0273 | 162-0278 | 162-0283 |
| 10 | 1.40 | 162-0269 | 162-0274 | 162-0279 | 162-0284 |
| 20 | 2.80 | 162-0270 | 162-0275 | 162-0280 | 162-0285 |
| 40 | 5.60 | 162-0271 | 162-0276 | 162-0281 | 162-0286 |
| 50 | 7.00 | 162-0272 | 162-0277 | 162-0282 | 162-0287 |
| **Far UV Quartz (170–2700 nm)** | | | | | |
| 5 | 0.70 | 162-0288 | 162-0293 | 162-0298 | 162-0303 |
| 10 | 1.40 | 162-0289 | 162-0294 | 162-0299 | 162-0304 |
| 20 | 2.80 | 162-0290 | 162-0295 | 162-0300 | 162-0305 |
| 40 | 5.60 | 162-0291 | 162-0296 | 162-0301 | 162-0306 |
| 50 | 7.00 | 162-0292 | 162-0297 | 162-0302 | 162-0307 |



### Micro Rectangular Cuvettes – 2-mm Opening

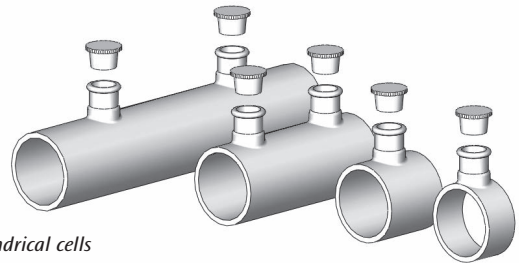
| Pathlength mm | Volume mL | With PTFE Cover/Clear Part Number | With PTFE Cover/Black Walled Part Number | With PTFE Stopper/Clear Part Number | With PTFE Stopper/Black Walled Part Number |
|---|---|---|---|---|---|
| **Optical Glass (320–2500 nm)** | | | | | |
| 5 | 0.35 | 162-0308 | 162-0313 | 162-0318 | 162-0323 |
| 10 | 0.70 | 162-0309 | 162-0314 | 162-0319 | 162-0324 |
| 20 | 1.40 | 162-0310 | 162-0315 | 162-0320 | 162-0325 |
| 40 | 2.80 | 162-0311 | 162-0316 | 162-0321 | 162-0326 |
| 50 | 3.50 | 162-0312 | 162-0317 | 162-0322 | 162-0327 |
| **Far UV Quartz (170–2700 nm)** | | | | | |
| 5 | 0.35 | 162-0328 | 162-0333 | 162-0338 | 162-0343 |
| 10 | 0.70 | 162-0329 | 162-0334 | 162-0339 | 162-0344 |
| 20 | 1.40 | 162-0330 | 162-0335 | 162-0340 | 162-0345 |
| 40 | 2.80 | 162-0331 | 162-0336 | 162-0341 | 162-0346 |
| 50 | 3.50 | 162-0332 | 162-0337 | 162-0342 | 162-0347 |



## Ordering Information

### Cylindrical Cells with Teflon Stoppers –22-mm Diameter

| Pathlength mm | Volume mL | Optical Glass (334–2500 nm) | Far UV Quartz (170–2700 nm) | NIR Quartz (220–3800 nm) |
|---|---|---|---|---|
| 10 | 2.80 | 162-1831 | 162-1841 | 162-1801 |
| 20 | 5.60 | 162-1832 | 162-1842 | 162-1802 |
| 50 | 14.10 | 162-1835 | 162-1845 | 162-1805 |
| 100 | 28.20 | 162-1840 | 162-1850 | 162-1810 |



*Cylindrical cells*

### Vials and Disposable Cuvettes

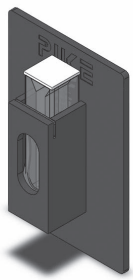
| Part Number | Description |
|---|---|
| 162-0205 | 5-mm Disposable Glass Vials, 5 x 42 mm (200 ea.) |
| 162-0208 | 8-mm Glass Vials, 8 x 43 mm (200 ea.) |
| 162-0212 | 12-mm Glass Vials, 12 x 32 mm (200 ea.) |
| 162-0348 | Polystyrene, Disposable Cuvettes, 10-mm pathlength, 4.5 mL (100 ea.) |
| 162-0349 | Polystyrene, Semi-micro Disposable Cuvettes, 10-mm pathlength, 1.5 mL (100 ea.) |

### Cell Holders, Spacers and Stoppers

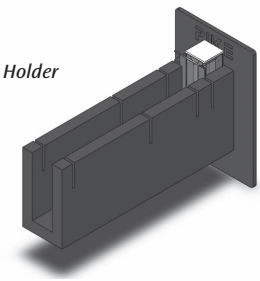
| Part Number | Description |
|---|---|
| 111-3650 | Cuvette Holder, 10 mm |
| 111-3660 | Adjustable Cuvette Holder, 10–100 mm |
| 161-2530 | Slide Sample Holder, Cylindrical Cell, 10–20 mm |
| 161-2540 | Slide Sample Holder, Cylindrical Cell, 50 mm |
| 161-2550 | Slide Sample Holder, Cylindrical Cell, 100 mm |
| 162-1201 | Spacer for 1-mm pathlength cuvette |
| 162-1202 | Spacer for 2-mm pathlength cuvette |
| 162-1205 | Spacer for 5-mm pathlength cuvette |

Notes: Please contact PIKE Technologies for replacement Teflon stoppers, covers, and for items not described on this list.

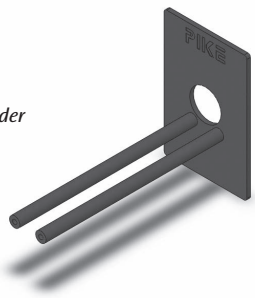
*10-mm Cuvette Holder*



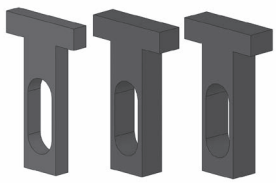

*Adjustable Cuvette Holder*



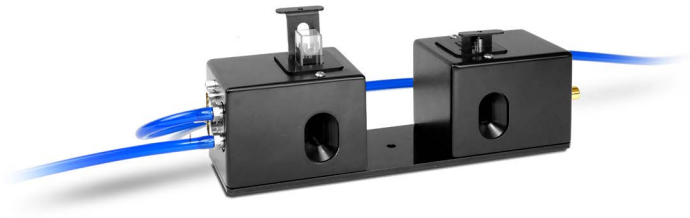

*Cylindrical Cell Holder*




*Spacers for 1-, 2- and 5-mm cells*



# Peltier-Controlled Cuvette Holders for UV-Vis Spectrophotometers – *Experiments Under Tightly Controlled Temperature Conditions*



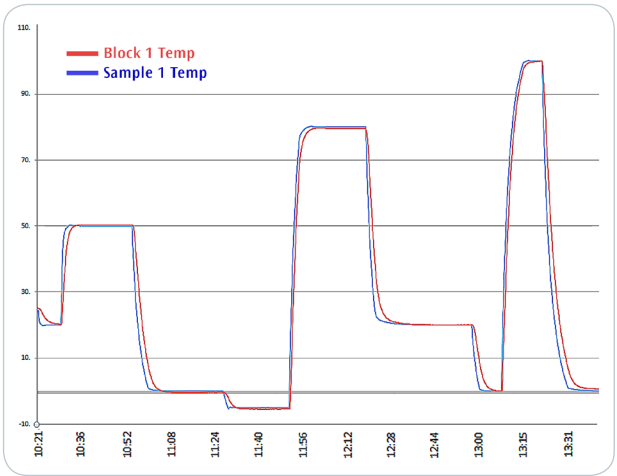
## Features

- Fast temperature response
- Precision temperature control
- Variable built-in magnetic stirring
- Single- and dual-beam configuration

The new series of PIKE Technologies Peltier accessories includes liquid-cooled cuvette holders, two-channel Temperature Controller and optional Liquid Recirculator. The complete PIKE Peltier Cuvette Accessory requires Peltier cuvette holders, Temperature Controller and Liquid Recirculator. With its efficient design, the Peltier Accessory offers precision temperature control and highly responsive ramping.

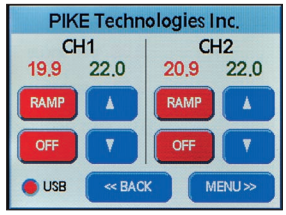
The cuvette holder can be used with single- and dual-beam spectrophotometers, and is offered in single or twin configurations. Each temperature-controlled cuvette holder features an efficient heat exchange design, variable speed magnetic stirrers, and a thermoelectric cooler based on Peltier principle. Liquid flow is used to remove excess heat from Peltier elements.

The Peltier cuvette holders are designed to accommodate standard size 10-mm pathlength cuvettes and shorter path cuvettes with appropriate spacers. The holders accommodate 8.5-mm and 15-mm beam Z-height configurations.

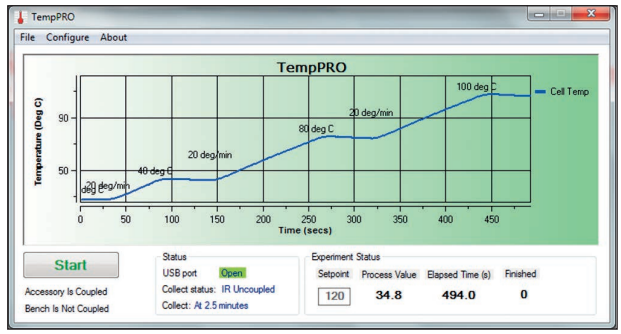



*Accessory performance showing block temperature (red) and sample probe temperature (blue).*

The temperature controller is configured for a single or dual channel used with the single and twin design, respectively. Within each channel, temperature may be controlled from the precision block RTD sensor or from an optional external temperature RTD probe inserted into the sample cell. All temperature controllers have a USB for PC communication and may be used with PIKE TempPRO software, which provides functions for accessory programming, setting of temperature points and ramping. Temperature controllers have a touchscreen LCD panel featuring intuitive, menu-driven programming. Single set points or simple ramping functions can be preprogrammed and performed.




*Dedicated temperature controller main menu*




*PIKE TempPro software for kinetic experiments*

## Specifications

| | |
|---|---|
| **Cuvette Holders** | |
| **Temperature Range** | -5 °C–110 °C |
| **Precision** | +/- 0.05 °C |
| **Temperature Accuracy** | +/- 0.3 °C from -5 °C to 110 °C |
| **RTD Probe** | 2 Wire Pt RTD (low drift, high stability) |
| **Stirring Speeds** | 10 Steps, Variable |
| **Cuvette Size** | 12.5 mm x 12.5 mm (accommodates smaller size with appropriate spacers) |
| **Z-height** | 8.5 mm and 15 mm |
| **Temperature Controller** | |
| **Precision** | +/- 0.1 °C |
| **Channels** | Single or Dual |
| **Functions** | Set point, temperature ramping |
| **Computer Interface** | USB |
| **Input Voltage** | 90–264 V, auto setting, external power supply |
| **Output Voltage** | 15 VDC/60 W maximum |
| **Dimensions** (W x D x H) | 83 x 105 x 85 mm |

## Ordering Information

| Part Number | Description |
|---|---|
| 171-70XXX | Peltier Cuvette Holder, single – liquid regulated |
| 171-80XXX | Peltier Cuvette Holder, twin – liquid regulated |
| 171-1250 | Temperature Control Unit, LCD/PC, single channel |
| 171-2250 | Temperature Control Unit, LCD/PC, dual channel |
| 171-1905 | RTD Probe for Peltier cuvette |
| 170-1100 | Liquid Recirculator for Peltier cuvette |
| 162-1905 | Micro Stir Bar, 6.35 mm (l) x 3 mm (dia) |

Notes: Replace XXX with your spectrophotometer's Instrument Code. Click for List >
Temperature control unit must be selected.

### Spacers

| Part Number | Description |
|---|---|
| 162-1201 | Spacer for 1-mm pathlength cuvette |
| 162-1202 | Spacer for 2-mm pathlength cuvette |
| 162-1205 | Spacer for 5-mm pathlength cuvette |

### Standard Rectangular Cuvettes

| Pathlength mm | Volume mL | Optical Glass (334–2500 nm) With PTFE Cover Part Number | Optical Glass (334–2500 nm) With PTFE Stopper Part Number | NIR Quartz (220–3800 nm) With PTFE Cover Part Number | NIR Quartz (220–3800 nm) With PTFE Stopper Part Number |
|---|---|---|---|---|---|
| 1 | 0.40 | 162-0220 | 162-0228 | 162-0252 | 162-0260 |
| 2 | 0.70 | 162-0221 | 162-0229 | 162-0253 | 162-0261 |
| 5 | 1.70 | 162-0222 | 162-0230 | 162-0254 | 162-0262 |
| 10 | 3.50 | 162-0223 | 162-0231 | 162-0255 | 162-0263 |
| 20 | 7.00 | 162-0224 | 162-0232 | 162-0256 | 162-0264 |
| 40 | 14.00 | 162-0225 | 162-0233 | 162-0257 | 162-0265 |
| 50 | 17.50 | 162-0226 | 162-0234 | 162-0258 | 162-0266 |
| 100 | 35.00 | 162-0227 | 162-0235 | 162-0259 | 162-0267 |

Sophisticated Science

# Falcon UV-Vis –
## *Precise Cell Temperature Control Accessory*


## Features

- **Fast and easy analysis of samples under precise Peltier temperature control**
- **Choice of cuvette and vial adapters**
- **Compatible with 1-mm to 10-mm pathlength cuvettes and disposable vials**
- **Excellent thermal accuracy and precision**
- **Available for selected UV-Vis spectrophotometers**

The PIKE Technologies UV-Vis Cell Temperature Control Accessory is an excellent choice for analysis of liquid samples that require precise temperature control. The accessory is well suited for pharmaceutical, life science and general industrial applications. Temperature range of the accessory is 5 °C to 130 °C with +/- 0.5% accuracy. Heating and cooling is controlled by a built-in Peltier device. The Peltier element provides for reproducible ramping and for reaching target temperatures quickly and reliably. The system is driven by a digital temperature controller – directly, or via PC. Individual sample holders are designed to accommodate standard 1-mm to 10-mm cuvettes (1-, 2- and 5-mm cuvettes require use of spacers) and 5-, 8- and 12-mm glass vials. Sample holders are pin positioned to ensure maximum reproducibility.

The complete Falcon UV-Vis configuration requires the accessory base, vial or cuvette holder, and one of the available temperature controllers. The Falcon accessory is compatible with a selected range of UV-Vis spectrophotometers.


*PIKE Liquid Recirculator*

## Ordering Information

| Part Number | Description |
|---|---|
| 110-60XXX | UV-Vis Falcon Base<br>*Includes temperature controlled base (digital temperature controller and sample holder need to be selected from the tables below for complete system)* |

Note: Replace XXX with your spectrophotometer's Instrument Code. Click for List >

### Temperature Controllers *(must choose one)*

| Part Number | Description |
|---|---|
| 076-1230 | Digital Temperature Control Module |
| 076-1430 | Digital Temperature Control Module, PC Control (USB) |

### Sample Holders *(must choose at least one)*

| Part Number | Description |
|---|---|
| 111-3610 | Vial Holder, 5 mm |
| 111-3620 | Vial Holder, 8 mm |
| 111-3630 | Vial Holder, 12 mm |
| 111-3640 | Cuvette Holder, 1 cm |

Notes: Spacers for short pathlength cuvettes are designed to work only with 1-cm cuvette holder.

### Options

| Part Number | Description |
|---|---|
| 162-0205 | Glass Vials, 5 mm, 5 x 42 mm OD (200 ea.) |
| 162-0208 | Glass Vials, 8 mm, 8 x 43 mm OD (200 ea.) |
| 162-0212 | Glass Vials, 12 mm, 12 x 32 mm OD (200 ea.) |
| 162-0255 | Falcon Quartz Cuvette, 1 cm |
| 162-1201 | Spacer for 1-mm Cuvette |
| 162-1202 | Spacer for 2-mm Cuvette |
| 162-1205 | Spacer for 5-mm Cuvette |
| 170-1100 | Liquid Recirculator |

## Specifications

| | |
|---|---|
| **Temperature Control** | Peltier (cooling and heating) |
| **Temperature Range** | 5 °C to 130 °C |
| **Accuracy** | +/- 0.5% |
| **Sensor Type** | 3 wire Pt RTD (low drift, high stability) |
| **Temperature Controllers** | |
| Digital | +/- 0.5% of set point |
| Digital PC | +/- 0.5% of set point, graphical setup, up to 20 ramps, USB interface |
| **Input Voltage** | 90–264 V, auto setting, external power supply |
| **Output Voltage** | 16 VDC/150 W maximum |
| **Dimensions** (W x D x H) | 89 x 121 x 83 mm (without FTIR baseplate and mount) |

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.

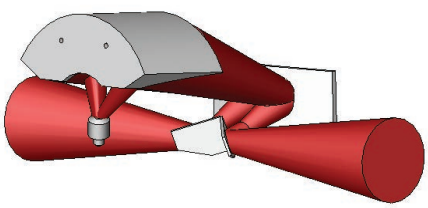
# UV-Vis DiffusIR –
## *Highly Efficient Collection Optics for Maximum Sensitivity*


## Features

- **Micrometer-controlled sample focus to optimize results for every sample**
- **Optional environmental chambers for heating, cooling and high-vacuum applications**
- **Quick-release feature of environmental chambers for easy insertion and removal of sealed chambers**
- **Digital PC temperature controller option for programming ramping rates and isothermal hold times**

PIKE Technologies introduces the UV-Vis DiffusIR™ diffuse reflectance accessory for research and routine measurements. Powered optical mirrors are diamond-turned aluminum for optimal performance and reflectivity. The UV-Vis DiffusIR base is completely enclosed to shield against external light. To avoid additional stray light from filtering into the accessory, a magnetically-attached light shield is included to cover the sample slide. The standard configuration offers a two-position slide to accommodate reference and sample cups.

The heart of the UV-Vis DiffusIR is a unique monolithic ellipsoidal reflector permanently fixed in place – eliminating the need for repositioning the focus optics for sample placement. The optical design efficiently collects diffuse radiation generated from the sample. The sample Z-position can be optimized by using the micrometer sample focusing adjustment. In this manner the sensitivity of the accessory is maximized without sacrificing precision. The UV-Vis DiffusIR comes equipped with a Sample Preparation and Loading Kit.

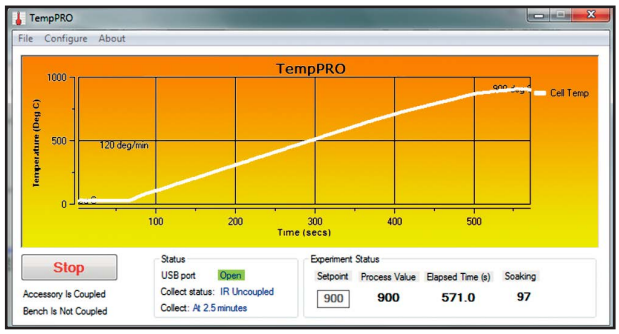


*Optical geometry of the UV-Vis DiffusIR*

For advanced temperature studies, environmental chambers are available and may be configured for temperatures from -150 °C to 1000 °C. Using the chamber's porous ceramic sample cups, reaction gases may be flowed through the sample. All chambers are compatible with the FT-IR/NIR DiffusIR also.

*Environmental Chamber for the UV-Vis DiffusIR*

Coupling the UV-Vis DiffusIR and environmental chambers with the PIKE PC controlled temperature module and TempPRO™ software provides the ability to graphically set up the experiment with up to 20 ramps and hold times.




*PIKE Technologies TempPRO software provides a graphical interface for temperature control and kinetic measurements.*


*Liquid nitrogen-cooled system and temperature control module.*



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## Ordering Information

| Part Number | Description |
|---|---|
| 041-10XXX | UV-Vis DiffusIR Accessory<br>*Includes Sample Preparation Kit with 2 micro and 2 macro sample cups, sample loading tools, alignment mirror, 35-mm mortar with pestle and KBr powder (100 g)* |

Notes: Replace XXX with your spectrophotometer's Instrument Code. Click for List >

### Options

| Part Number | Description |
|---|---|
| 162-4150 | UV-Vis DiffusIR Environmental Chamber, HTV, ambient to 500 °C |
| 162-4200 | UV Vis DiffusIR Environmental Chamber, HTV, ambient to 1000 °C |
| 162-4140 | UV-Vis DiffusIR Environmental Chamber, LTV, -150 to 500 °C |

Notes: HTV and LTV chambers require the selection of a temperature control module. UV-Vis DiffusIR chambers include front plate accommodating environmental chamber (easily changeable with standard UV-Vis DiffusIR front plate), Pin-Loc chamber insertion for easy sample exchange, KBr window, ceramic sampling cups compatible with vacuum and reaction formats, ports and 2 shut-off valves for vacuum operation and ports for connection of water cooling. Operation of the LTV at sub-ambient temperatures requires PN 162-4160 Liquid Nitrogen-Cooled System and Temperature Control Module, and rotary pump for vacuum insulation.

### Temperature Control Modules

| Part Number | Description |
|---|---|
| 076-2450 | PC Controlled Temperature Module, HTV Chambers<br>*Includes digital temperature selection and TempPRO software* |
| 076-2250 | Digital Temperature Control Module, HTV Chambers |
| 162-4160 | Liquid Nitrogen Cooled System and Temperature Control Module, DiffusIR Environmental Chamber, LTV, -150 to 500 °C |

Notes: PC controlled temperature module with TempPRO software provides a graphical user interface for setting experiment parameters. Please contact PIKE for PC compatibility. The temperature control modules for the HTV and LTV chambers are not interchangeable.

### Replacement Parts and Supplies

| Part Number | Description |
|---|---|
| 170-1100 | Liquid Recirculator |
| 042-2010 | Sample Cup, micro, 6-mm diameter, 1.6 mm deep (2 ea.) |
| 042-2020 | Sample Cup, macro, 10-mm diameter, 2.3 mm deep (2 ea.) |
| 042-3010 | Abrasion Sampling Kit |
| 042-3020 | Abrasion Disks, silicon carbide (100 ea.) |
| 042-3025 | Abrasion Disks, diamond (50 ea.) |
| 042-3030 | Sample Cup Holder and Base |
| 160-8010 | KBr Powder, 100 g |
| 042-3040 | Sample Preparation Kit |
| 042-3060 | Flat Sample Post |
| 042-3080 | Alignment Mirror |
| 162-4303 | Rotary Pump for vacuum insulation |

### Replacement Parts and Supplies *(cont.)*

| Part Number | Description |
|---|---|
| 160-1132 | Disk, KBr, 32 x 3 mm |
| 160-1113 | Disk, ZnSe, 32 x 3 mm |
| 160-1372 | Disk, UV-Vis $SiO_2$, 32 x 3 mm |
| 160-5049 | Disk, $SiO_2$, 32 x 3 mm |
| 160-5125 | Disk, low OH $SiO_2$, 32 x 3 mm |
| 160-1143 | Disk, $CaF_2$, 32 x 3 mm |
| 162-4210 | O-Ring for UV-Vis DiffusIR chamber (10 ea.) |
| 162-4215 | O-Ring for UV-Vis DiffusIR chamber cooling line (10 ea.) |
| 162-4251 | Ceramic Cup for UV-Vis DiffusIR chamber, porous |
| 162-4270 | Alignment Mirror for UV-Vis DiffusIR chamber |

Note: Please contact PIKE Technologies for items not described in this list.

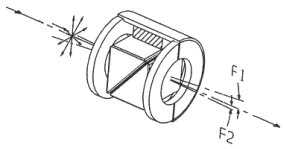
### Specifications

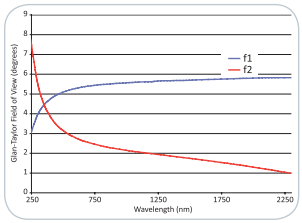
| | |
|---|---|
| **Optical Design** | 3X ellipsoidal |
| **Angle of Incidence** | 30 degrees, nominal |
| **Dimensions** (W x D x H) | 102 x 225 x 201 mm (excluding light guard tubes and baseplate) |
| **Sample Focus** | Micrometer |
| **Sample Positions** | 2 positions, slide stops for background and sample with no purge loss |
| **Sample Cups** | Micro: 6 x 1.6 mm deep<br>Macro: 10 x 2.3 mm deep |

### Environmental Chamber Specifications

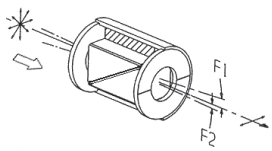
| | |
|---|---|
| **Temperature Range, HTV** | Ambient to 500 or 1000 °C |
| **Temperature Range, LTV** | -150 to 500 °C |
| **Accuracy** | +/- 0.5% |
| **Input Voltage** | 100–240 VAC (HTV version)<br>110/220 V switchable (LTV version) |
| **Operating Voltage** | 28 VDC/84 W (HTV and LTV versions) |
| **Temperature Control** | Digital or Digital PC |
| **Heating Rate, Maximum** | 120 °C/min |
| **Kinetic Setup** (requires digital PC controller, includes PIKE TempPRO software) | • Up to 20 temperature ramps<br>• Individual ramp rate and hold time settings<br>• Graphical display of experiment settings<br>• USB interface |
| **Sensor** | K Type (for HTV)<br>RTD Type, Pt100 (for LTV) |
| **Vacuum Achievable** | 1 x $10^{-6}$ Torr (13 x $10^{-4}$ Pa) |
| **Window Size** | 32 x 3 mm disk |
| **Leaking Rate** | < 6.0 x $10^{-11}$ Pa $m^3$/sec |
| **Sample Cup Size** | 6.0-mm OD, 4.0-mm height<br>4.7-mm ID, 2.0-mm depth |
| **Sample Cup Design** | Porous ceramic compatible with powders and gas flow |
| **Cooling Ports** | Quick-Fit, 6-mm ID |
| **Gas/Vacuum Ports** | 1/8" Swagelok® |

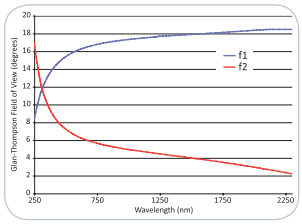
# UV-Vis Calcite Polarizers – *Manual and Automated Versions*




*Glan-Taylor field of view*




*UV Glan-Thompson field of view*

## Features

- **Glan-Taylor and UV Glan-Thompson designs**
- **High-grade calcite**
- **High extinction ratio**
- **Manual versions – 1 degree settable angular resolution**
- **Automated version – 0.5 degree angular resolution**
- **Fits in a standard 2 x 3 inch mount**

PIKE Technologies offers Glan-Taylor and Glan-Thompson UV-Vis polarizers. These take advantage of the birefringent properties of UV-quality calcite. An air interface is assembled between two right angle calcite prisms in the Glan-Taylor polarizer whereas a UV-transparent cement separates the calcite prisms in the Glan-Thompson polarizer. In both styles, the polarized extraordinary ray passes through both prisms and the ordinary ray is internally reflected and absorbed. The spectral range of these polarizers is 250–2300 nm. Due to the natural origin of calcite the achievable minimum wavelength fluctuates from polarizer to polarizer. However, at 250 nm the transmission throughput is no less than 25%.

| Wavelength (nm) | 250 | 300 | 400 | >500 |
|---|---|---|---|---|
| Minimum Transmission (%) | 25 | 40 | 65 | 85 |

Each polarizer type has a different field of view where the UV-Vis beam is polarized. The UV Glan-Thompson field of view is wider compared to the Glan-Taylor as shown in the figure.

Enhanced angular resolution of 0.5° is gained with the automated version of the PIKE UV-Vis polarizer. This automated feature is advantageous where highly precise angular settings are required and for increasing the measurement simplicity for determining the polarized orientation of a sample. By evaluating the transmission or reflectance of a sample as a function of the automated polarizer angle at a given wavelength, parallel and perpendicular orientation of the sample relative to the polarizer degree setting may be determined. The automated version includes integrated data collection with some commercial UV-Vis spectrophotometer software packages.

The sample material and sampling configuration dictate the need for a UV-Vis polarizer. Typical materials that may require a polarizer during sampling are often crystals, films, paints, beam splitters, coated glass, and anti-reflective, and anti-glare coatings. Additionally, we recommend using a polarizer for specular reflectance sampling at an angle of incidence greater than 15 degrees where the reflectivity becomes polarization dependent.

## Specifications

| | Glan-Taylor | UV Glan-Thompson |
|---|---|---|
| **Material** | Calcite | Calcite |
| **Spectral Range** | 250–2300 nm | 250–2300 nm |
| **Clear Aperture** | 12 mm | 14 mm |
| **Extinction Ratio** | $5 \times 10^{-5}$ | $1 \times 10^{-4}$ |
| **Manual Polarizer Dimensions** (W x D x H) | 29 x 50 x 146 mm | 49 x 50 x 146 mm |
| **Automated Polarizer Dimensions** (W x D x H) | 56 x 50 x 146 mm | 56 x 50 x 146 mm |
| **Angular Resolution, Manual** | 1° | 1° |
| **Angular Resolution, Auto** | 0.5° | 0.5° |

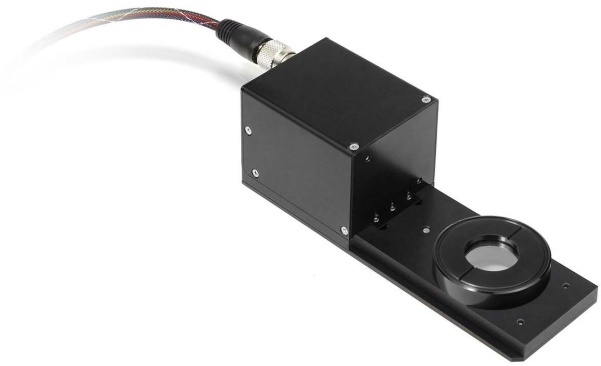
## Ordering Information

| Part Number | Description |
|---|---|
| 198-1623 | Manual Glan-Taylor |
| 198-1624 | Manual UV Glan-Thompson |
| 198-1625 | Automated Glan-Taylor |
| 198-1626 | Automated UV Glan-Thompson |

Note: Polarizers may not fit in the sample compartments of some smaller spectrophotometers. The automated polarizers include the PIKE Technologies Motion Control Unit and AutoPRO software for automated operation. Please consult PIKE Technologies before placing an order or to inquire about spectrophotometer slide mount holders.

Sophisticated Science

# UV-Vis Nanowire Grid Polarizers – *Manual and Automated Versions*



## Features

- **Thin profile**
- **Large acceptance angle, up to 20 degrees**
- **High transmission and high contrast choices**
- **Manual and automated versions**

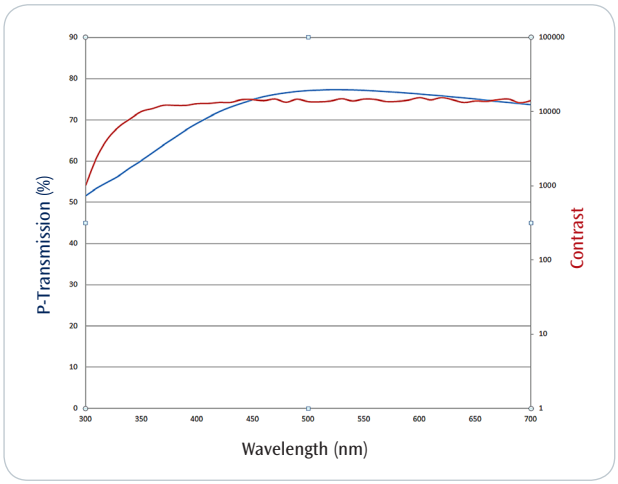
PIKE Technologies introduces an innovative new line of high-contrast polarizers covering the UV region and the Vis to NIR region. Using nanofabricating techniques, wire grid lines at a 100-nm pitch are etched on fused silica or glass substrate resulting in a high-performance polarizer. Compared to a traditional calcite polarizer, the large acceptance angle of the nanowire grid polarizer, greater than 20 degrees, eases alignment concerns during use. Additionally, the compact size makes these polarizers ideal for use in confined spaces. The element diameter is 25 mm and has a clear aperture of 19 mm. The polarizer fits a 2 x 3 inch slide mount.

Transmission and contrast ratio of the UV ultra contrast and the broadband polarizers are shown in the next column. Contrast ratio greater than 10,000:1 may be found, making these high-performance polarizers a competitive alternative to calcite polarizers.

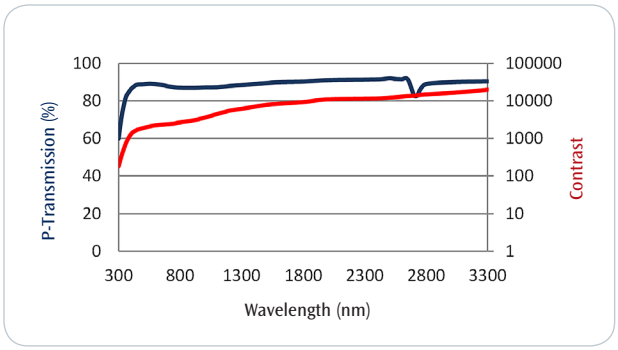
There are two manual polarizer types available. The short form has 5 degree scale resolution and the long form has scale resolution of 1 degree. The automated precision polarizers are fully computer controlled and offer the added benefit of increased setting reproducibility with accuracy of +/- 0.5 degree. With automated polarizers an analysis program can be set up through PIKE AutoPRO software, and includes data collection with some spectrophotometer software packages.

## Specifications

| | |
|---|---|
| **Substrate** | Fused Silica |
| **Performance Range** | |
| UV, Ultra Contrast | 240–400 nm |
| Vis/NIR | 300–3200 nm |
| **Element Diameter** | 25 mm |
| **Clear Aperture** | 19 mm |
| **Dimensions** (W x D x H) | |
| Manual | 50 x 86 x 17 mm |
| Precision | 50 x 146 x 17 mm |
| Automated | 50 x 146 x 55 mm |




*UV Ultra-Contrast Polarizer performance data*



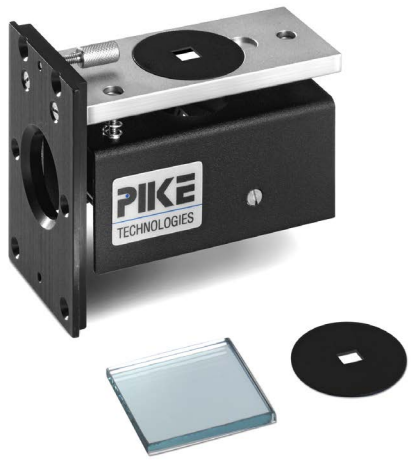

*Broadband Polarizer performance data*

## Ordering Information

| Part Number | Description |
|---|---|
| 190-2010 | Precision UV Polarizer, Ultra Contrast |
| 190-2012 | Manual UV Polarizer, Ultra Contrast |
| 190-2015 | Precision UV Polarizer, Ultra Contrast, Automated |
| 190-2020 | Precision Vis/NIR Broadband Polarizer, High Contrast |
| 190-2022 | Manual Vis/NIR Broadband Polarizer, High Contrast |
| 190-2025 | Precision Vis/NIR Broadband Polarizer, High Contrast, Automated |

Notes: The element diameter is 25 mm. Contact PIKE for 15-mm diameter options. Polarizers may not fit in the sample compartments of some smaller spectrophotometers. The automated polarizers include the PIKE Technologies Motion Control Unit and AutoPRO software for automated operation. Please consult PIKE Technologies before placing an order or to inquire about spectrophotometer slide mount holders.

# UV-Vis Spec –
## *Slide Mounted Specular Reflectance Accessories*

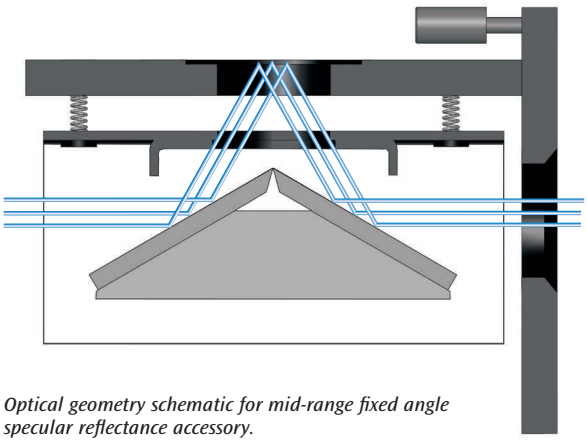



PIKE Technologies relative fixed angle specular reflectance accessories for UV-Vis spectrophotometers span from near-normal to grazing angle. This product sheet highlights our specular reflectance accessories featuring slide mount design. These cover mid-range angles of incidence, between 15–60°, and may be aligned to maximize throughput.

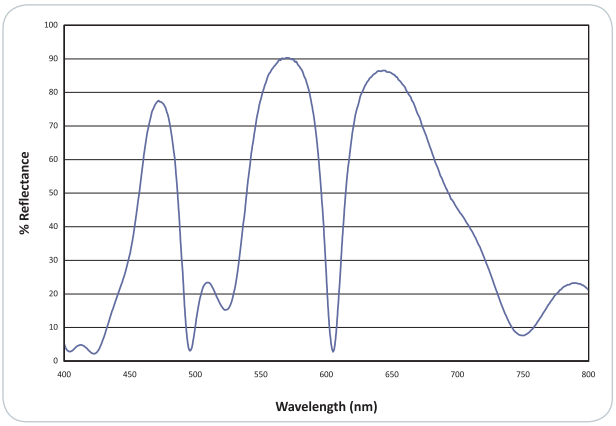
In specular reflectance sampling, the light source is directed to contact the sample at a given angle of incidence. Measured light is collected from the equivalent angle. Typical samples include semiconductors, anti-reflective coatings, color filters, semi-transparent and highly reflective mirrors, optical materials, reflection filters, multiple layers, solar mirrors and solar controlling films on glass. Measured parameters of interest include film thickness, material reflectivity, and coating uniformity and homogeneity.

### Features

- Fixed angle reflectance accessories including 15, 20, 30, 45 and 60 degrees
- Slide mount design for easy installation
- Optical and anti-reflective coatings testing
- Gloss measurements
- Determining reflectivity of mirrors
- Film thickness calculations



*Optical geometry schematic for mid-range fixed angle specular reflectance accessory.*




*Anti-reflective optics coating spectrum collected using the PIKE UV-Vis 60Spec.*

### Specifications

| | |
|---|---|
| **Mounting Method** | Slide mount |
| **Accessory Dimensions** | |
| **Slide Mount** (W x D x H) | 95 x 51 x 76 mm |
| **Mask Aperture** | 4 mm x 7 mm |
| **Optical Mirrors** | UV-optimized aluminum |

### Ordering Information

#### Fixed Angle Specular Reflectance Accessories

| Part Number | Description |
|---|---|
| 121-1500 | UV-Vis 15Spec |
| 121-2000 | UV-Vis 20Spec |
| 121-3000 | UV-Vis 30Spec |
| 121-4500 | UV-Vis 45Spec |
| 121-6000 | UV-Vis 60Spec |
| 300-0300 | UV Aluminum Mirror (25.4 mm x 25.4 mm) |
| 121-0500 | Aperture Mask (4 mm x 7 mm) |

Note: Please contact PIKE Technologies to inquire about spectrophotometer sample compartment slide mounts.

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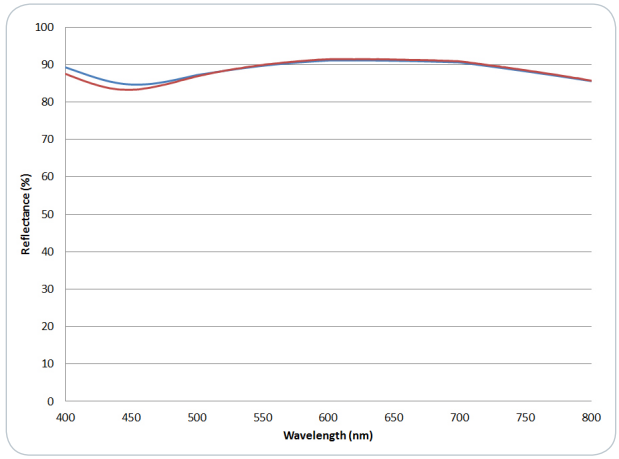
# UV-Vis 10Spec –
## *Near-normal Sample Reflectivity Measurements*


The PIKE Technologies UV-Vis 10Spec is an optimized specular reflectance accessory designed to make high-performance measurements of sample reflectivity. The UV-Vis 10Spec produces a collimated beam to illuminate the sample area such that the reflectivity measurement is uniformly 10 degrees and not an average of angles produced by a focused beam accessory design. This accessory fits most research-grade spectrophotometers.

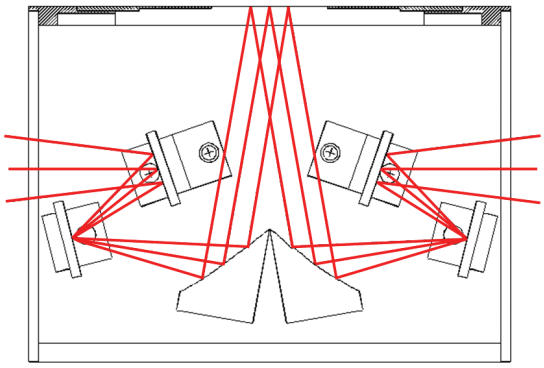
The UV-Vis 10Spec may also be used to measure near-normal reflectivity of a wide variety of surfaces including military devices, reflecting optics, anti-reflective (AR) coated surfaces, and other reflecting and non-reflecting materials.

### Features

- Measure sample reflectance
- Fixed 10 degree angle of incidence
- Sample illumination using collimated beam precisely fixed at 10 degrees
- Sampling mask sizes of 7, 13 and 25 mm x 4 mm
- Baseplate mount design for stable operation and collection of high-quality spectra




*FTIR spectra measuring the reflectively of $SiO_2$ coated aluminum mirror with the UV-Vis 10Spec.*



*Beam path within the UV-Vis 10Spec specular reflectance accessory.*

### Ordering Information

| Part Number | Description |
|---|---|
| 010-10XXX | UV-Vis 10Spec – 10 Degree Specular Reflectance Accessory<br>*Includes 3 sample masks (7, 13 and 25 mm x 4 mm), aluminum alignment mirror and base mount* |

Note: Replace XXX with your spectrophotometer's Instrument Code. Click for List >

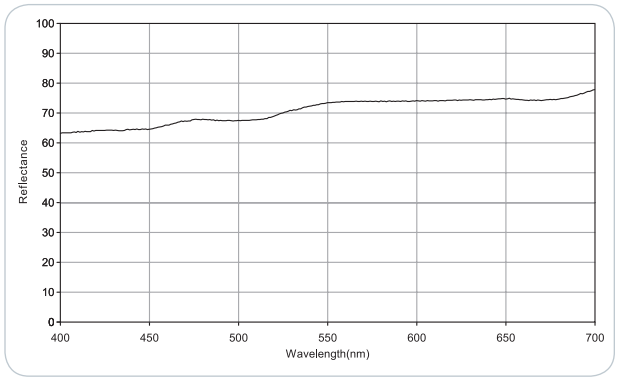
### Replacement Parts and Sampling Options

| Part Number | Description |
|---|---|
| 013-4015 | Aperture Mask Set, 7, 13, 25 mm x 4 mm |
| 300-0300 | UV-Aluminum Mirror, 25.4 mm x 25.4 mm |

### Specifications

| | |
|---|---|
| **Optics** | All reflective |
| **Angle of Incidence** | 10 degrees |
| **Sample Masks** | 7, 13 and 25 x 4 mm |
| **Purge Sealing** | Purge tubes and purge barb included |
| **Dimensions (W x D x H)** | 149 x 88 x 118 mm<br>(excludes baseplate) |

# UV-Vis 85Spec –
## *Specular Reflectance Accessory*



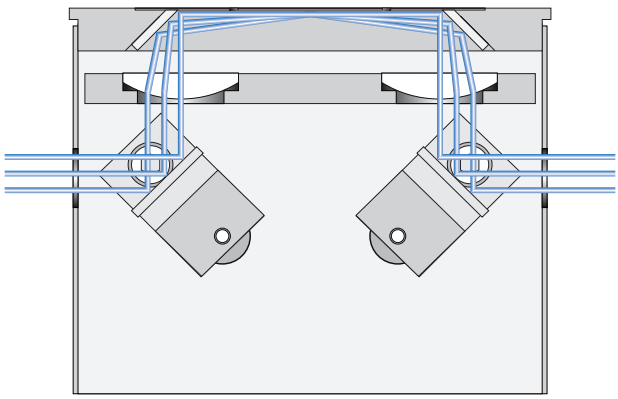

*AR-coated ZnSe crystal measured using the 85Spec specular reflectance accessory.*

## Features and Applications

- **Small footprint, compact design**
- **Fixed 85-degree angle of incidence**
- **Baseplate mount for stable operation and collection of high-quality spectra**
- **Thin film and coating measurements**

## Specifications

| | |
|---|---|
| **Angle of Incidence** | 85 degrees |
| **Mounting Method** | Baseplate |
| **Dimensions** (W x D x H) | 105 x 84 x 76 mm |
| **Mask Aperture** | 35 x 3 mm |
| **Optical Mirrors** | UV-optimized aluminum |



*Optical diagram of the UV-Vis 85Spec specular reflectance accessory.*

The 85Spec is an 85-degree specular reflectance accessory developed for UV-Vis applications. The accessory is used to analyze mirror-like planar surfaces and thin films on planar surfaces. The grazing angle measurements give the longest possible pathlength through coated samples.

Pre-mounted on a baseplate specific to your UV-Vis spectrophotometer, the 85Spec is an easy-to-use accessory. The mounting allows the 85Spec to be inserted and removed from the sample compartment without alignment.

## Ordering Information

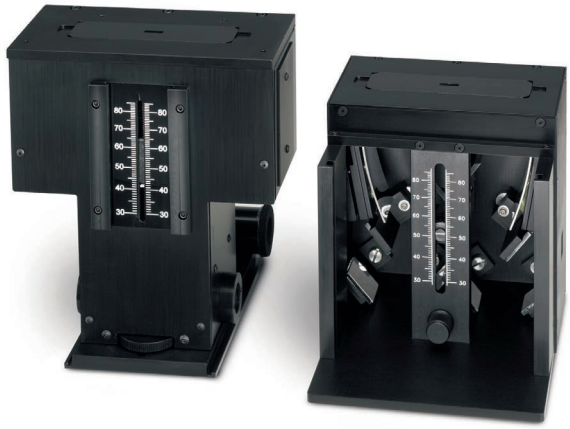
| Part Number | Description |
|---|---|
| 121-85XXX | UV-Vis 85Spec – 85 Degree Specular Reflectance Accessory<br>*Includes an Al substrate alignment mirror and sample mask* |

Note: Replace XXX with your spectrophotometer's Instrument Code. Click for List >

### Replacement Parts

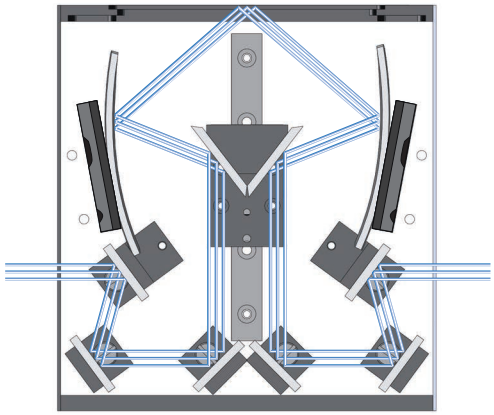
| Part Number | Description |
|---|---|
| 300-0301 | UV-Aluminum Mirror (38.1 mm x 38.1 mm) |
| 121-0501 | Aperture Mask (35 mm x 3 mm) |

# UV-Vis VeeMAX –
# *Variable Angle Specular Reflectance Accessory*



## Features and Applications

- **Selectable angle of incidence – from 30 to 80 degrees in one degree increments**
- **Film and coating thickness measurements at optimized angle of incidence**
- **Grazing angle measurements for the longest path through ultra-thin films**
- **Characterization of variable reflectivity materials**

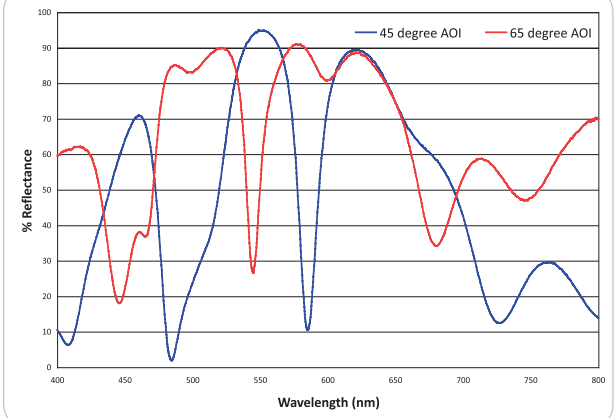


*Optical geometry schematic for UV-Vis VeeMAX variable angle specular reflectance accessory.*

In specular reflectance sampling, the light source is directed to contact the sample at a given angle of incidence. Measured light is collected from the equivalent angle. Typical samples include semiconductors, anti-reflective coatings, spectral wavelength filters, semi-transparent and highly reflective mirrors, optical materials, reflection filters, multiple layers, solar mirrors, and solar controlling films on glass. Measured parameters of interest include film thickness, material reflectivity, and coating uniformity and homogeneity.

With the UV-Vis VeeMAX™ accessory find versatility for specular reflectance measurements. The angle of incidence from 30 degrees to 80 degrees is easily changed by turning the angle setting dial.

This flexibility allows for optimization of spectral quality for film and coating measurements. In other applications where it is desirable to study the effect of incident angle upon reflected radiation, the UV-Vis VeeMAX offers a sampling solution. For samples such as reflectors, bandpass filters, and hot and cold mirrors. The UV-Vis VeeMAX makes an ideal accessory used to replicate real-world situations such as the effect of a rising and setting sun on absorbance efficiency of solar collectors and architectural glass performance.




*Specular reflectance collected at two different angles of incidence for an anti-reflective coating.*

## Specifications

| | |
|---|---|
| **Angle of Incidence** | 30–80 degrees |
| **Mounting Method** | Baseplate |
| **Nominal Accessory Dimensions** (W x D x H) (dimensions vary with spectrophotometer type) | 145 x 135 x 158 mm |
| **Minimum Beam Height** | 50 mm |
| **Mask Aperture** | 7 mm x 4 mm<br>13 mm x 4 mm<br>25 mm x 4 mm |
| **Optical Mirrors** | UV-optimized aluminum |

## Ordering Information

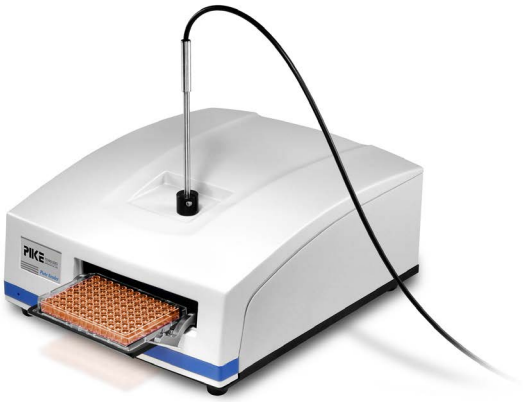
| Part Number | Description |
|---|---|
| 013-10XXX | UV-Vis VeeMAX Variable Angle Specular Reflectance Accessory<br>*Includes masks and aluminum mirror* |

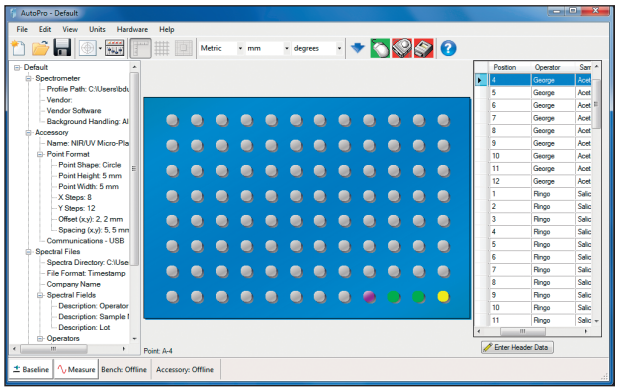
Note: Replace XXX with your spectrophotometer's Instrument Code. Click for List >

## Replacement Parts

| Part Number | Description |
|---|---|
| 300-0300 | UV Aluminum Mirror (25.4 mm x 25.4 mm) |
| 013-4015 | Aperture Mask Set (7, 13 and 25 mm x 4 mm) |

# Out-of-Compartment Microplate Reader –
## *Plate Reading Option for UV-Vis Spectrophotometers*





*AutoPRO Software – Microplate Reader configuration screen.*

## Features

- **Microplate reading option for standard UV-Vis spectrophotometers**
- **Scanning and fixed wavelength measurements (spectrophotometer dependent)**
- **On-board detector**
- **6-well to 384-well microplate reading capability**
- **Custom configurations for automated sampling**
- **CD-style loading for autoloader interface**

The PIKE Technologies Out-of-Compartment Microplate Reader is a unique option available for UV-Vis spectrophotometers. It offers high throughput plate reading capability to a wide range of traditional instruments with standard sample compartments. This allows for flexibility when conducting experiments that require optical configuration for cuvettes, temperature control, integrating spheres (among others) and extra microplate reading functionality when needed. Microplate reading capability is often required in research, drug discovery, bioassay validation, quality control and manufacturing processes in the pharmaceutical and biotechnological industry and academia. The PIKE Microplate Reader can also be adapted to perform automated measurements of filters, optical components and other materials.

The Microplate Reader module features a small footprint and can be positioned next to or above the spectrophotometer. Using a fiber coupler in the sample compartment, the light is sent to the accessory via a single optical fiber probe and collected by an on-board photodiode detector.

The mechanical design of the accessory relies on an X, Y stage with both axes driven by high-precision servo motors with optical encoders for speed and reproducibility. USB and DC power are the only external connections required for this accessory.

Programming and control of the Microplate Reader is done through PIKE Technologies AutoPRO software, which can be integrated easily with many third-party UV-Vis software packages.

## Specifications

| | |
|---|---|
| **Optics** | Transfer optics module, optical fiber probe and photodiode detector |
| **Accuracy** | +/- 25 µm |
| **Mechanical Specifications** | |
| Repeatability | +/- 5 µm |
| Resolution | 1 µm |
| Run Time | 96-well plate – 32 seconds<br>384-well plate – 84 seconds |
| **Computer Interface** | USB |
| **Power Requirements** | 100–240 Volts AC 50/60 Hz |
| **Dimensions** (W x D x H) | 11.6 x 13.7 x 6" |
| **Weight** | 15 lbs |

## Ordering Information

| Part Number | Description |
|---|---|
| 047-10XXX | Microplate Reader Accessory |

Note: Replace XXX with your spectrophotometer's Instrument Code. Click for List >

### Option

| Part Number | Description |
|---|---|
| 162-1910 | 96-Well Polystyrene Sample Plate |

### Required Optical Components *(must select fiber optic probe and photodiode detector)*

| Part Number | Description |
|---|---|
| 047-3011 | Photodiode Detector, Cary 50/60 |
| 047-3030 | Optical Fiber Probe |

Note: Contact PIKE Technologies to verify that the accessory is compatible with your spectrophotometer. Requires fiber optic launch optics or fiber couple from spectrophotometer manufacturer.



PIKE Technologies
WWW.PIKETECH.COM
608-274-2721

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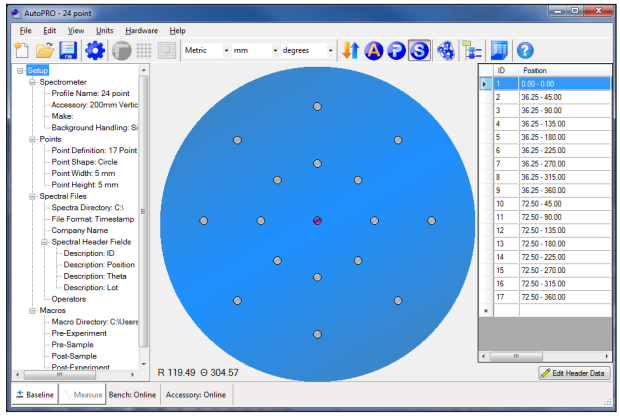
# Automated Transmission R-Theta Rotational Stages for UV-Vis Spectrophotometers

## Features

- R-theta motion mapping optical samples
- Complete hardware and software interface package for automated, multi-position measurements
- Light-tight enclosure included
- Custom inserts available

PIKE Technologies' vertical R-theta computer controlled accessories for translating and rotating samples in the spectrophotometer beam. These tools enable transmission mapping of sample surfaces and generating spectroscopy data as a function of sample position. Suitable for determination of film and coating thickness, multilayer film analysis, reflectivity studies and characterization of optical materials. Using the standard sample wheel and custom inserts, these accessories are suitable for analyzing small and large size samples including coated and uncoated glass, optical filters, solar panels and similar materials. Support ring mounts on the accessory's drive and is rotated and translated laterally to produce an R-theta motion covering the entire sampling range of the accessory. Each system incorporates two precision stepper motors for the plate movement.

The operation is managed by PIKE AutoPRO™ software which provides full user programmability and an easy to learn "point-and-click" environment. Polar or X and Y coordinates may be used to define test points. The AutoPRO software allows complex test sequences to be set up, stored as methods and implemented for full flexibility. Each automated accessory is tailored to meet specific sampling needs. This includes adjustments for sample shape/size, and the type of spectroscopic data required. Please contact PIKE Technologies to verify that the selected stage can be integrated into your spectrophotometer's sample compartment and for custom sample inserts.




*AutoPRO software configured for the Vertical Transmission Accessory.*

## Ordering Information

| Part Number | Description |
|---|---|
| 073-4011 | Vertical 12 inch Transmission Accessory – Cary 5000/6000<br>*Includes vertical mapping stage with light enclosure, motor controller* |
| 073-5100 | Vertical 12 inch Transmission Accessory – Lambda 750/850/950/1050<br>*Includes vertical mapping stage with light enclosure, motor controller* |
| 073- 5011 | Vertical 8 inch Transmission Accessory – Cary 5000/6000<br>*Includes vertical mapping stage with light enclosure, motor controller* |
| 073-5010 | Vertical 8 inch Transmission Accessory – Cary 500/500<br>*Includes vertical mapping stage with light enclosure, motor controller* |

Note: For sizes not listed here or custom inserts, please contact PIKE Technologies. Ask about X, Y movement accessories and horizontal stages.

# Ordering Terms, Contact Information and Guarantee

## Part Numbers and Price

The PIKE price list includes accessories that may be used with a variety of makes and models of spectrometers. Please specify the part number and description when ordering, including your instrument type and model number. Click here for a list of spectrometer and spectrophotometer instrument codes. When placing an order, substitute these codes for the final two digits (XX) in the accessory part number.

PIKE Technologies is continually extending the accessory product range. If you are unable to find a required item, please contact us to discuss your needs. We will be glad to assist.

## Payment Terms

Purchase Order Number, cash in advance, MasterCard and Visa are acceptable. Payment is net 30 days, and shipments are FOB Madison, WI USA. Freight charges are prepaid and added to your invoice. If you wish to pay freight charges, please specify this on your order. Prepayment is required for international customers.

## International Handling Fee

For orders placed from outside the United States or Canada, a handling fee of $40 will apply per order to cover the costs associated with the additional documentation and bank charges required for international shipments.

## Ways to Order

Many products are available for purchase directly through our website. These items are marked on our website with a red shopping cart icon.

Please include the following information when placing an order: your name, phone number, product part number, quantity, ship to address, bill to address, purchase order number and spectrometer model on which the accessory will be used.

Orders may be placed via mail, phone, fax, e-mail or on our website. We accept Visa and Mastercard via phone and direct online purchases. For security purposes, do not send credit card information via e-mail. An electronic order form is available on our website (for P.O. Numbers only – do not use this form for credit card orders). There is no minimum order requirement. Please use the following addresses and phone/fax numbers when placing your orders:

**PIKE Technologies, Inc.**
**6125 Cottonwood Drive**
**Madison, WI 53719**
**(608) 274-2721** (TEL)
**(608) 274-0103** (FAX)
orders@piketech.com (E-MAIL)
www.piketech.com

## Delivery

The delivery/shipment date is confirmed upon receipt of an order. Special requirements and custom accessories are subject to different lead times. Please contact us for price quotes and delivery information on these products.

## Guarantee

All PIKE products are guaranteed to be free from defects in material and workmanship for a period of 12 months from the date of shipment. Should you be dissatisfied, or have any queries, please contact us immediately and we will promptly repair or replace the product at no charge.

## Product Returns

Please contact PIKE to receive your Return Material Authorization (RMA) number if you wish to return any of our products. A restocking fee may apply. Customers are responsible for shipping charges for all returned products. For products under warranty, back-to-customer shipping charges will be covered by PIKE. Please do not return any products without obtaining the RMA number first.

## Technical Assistance

PIKE Technologies offers comprehensive technical assistance. Please contact us via mail, phone, fax or e-mail with your questions.

## International Distribution

PIKE Products are available worldwide. Call or send us an e-mail and we will provide you with an address of the sales office closest to your location. All exports are handled in accordance with the US Export Administration Regulations.

## PIKE on the Web

Visit our web site to find out more information about new products, up-to-date PIKE news, pricing, and to see the latest copy of the PIKE Reflections Newsletter! www.piketech.com • info@piketech.com

Customer satisfaction is very important to all of us here at PIKE Technologies, Inc. We have hopefully made the ordering process very fast and easy for you. If you have any questions or concerns about our products or services, please don't hesitate to contact us. We will be happy to make adjustments to fit your needs.

Products and prices are subject to change without notification.

# FTIR and UV-Vis Instrument Codes

**When ordering a PIKE accessory, replace the XX or XXX portion of the product's part number with your spectrometer's instrument code below. For assistance, please contact a PIKE customer service representative at (608) 274-2721 or sales@piketech.com.**

## FTIR Instrument Codes (XX)

| | |
|---|---|
| **ABB Bomem** | |
| FTLA2000-100 (Arid Zone) | 80 |
| Michelson 100, MB Series | 81 |
| MB 3000 | 82 |
| **Agilent** | |
| Excalibur™, Scimitar™, FTS, 600-IR Series | 10 |
| Excalibur™, Scimitar™, 600-IR Series with recognition | 13 |
| **Analect (See Hamilton Sundstrand)** | |
| **Bio-Rad (See Agilent)** | |
| **Bruker Optics** | |
| IFS™, Vector™, Equinox™ Series. | 50 |
| Tensor™, Vertex™ with recognition (Quick-Lock) | 51 |
| **Buck Scientific** | |
| M500 | 65 |
| **Digilab (See Agilent)** | |
| **Hamilton Sundstrand AIT** | |
| Diamond 20 | 60 |
| **Horiba** | |
| 7000 Series | 35 |
| **Interspectrum** | |
| Interspec 200-X | 90 |
| **Jasco** | |
| 300/600 Series | 56 |
| 400 | 57 |
| 4000/6000 Series | 58 |
| **JEOL** | |
| Winspec™ Series | 46 |
| **Lambda Scientific** | |
| Lambda FTIR 7600 | 66 |
| Lambda FTIR 8600 | 64 |
| **Lumex** | |
| INFRALUM FT-02, FT-08 | 67 |
| **Mattson (See Thermo Electron)** | |
| **Midac** | |
| M Series | 30 |
| **Nicolet (See Thermo Electron)** | |
| Oriel | 95 |
| **Optical Table** | 99 |
| **PerkinElmer** | |
| 1700 Series | 70 |
| Spectrum™ GX, 2000 | 71 |
| Spectrum BX / RX, 1600, Paragon 1000 | 73 |
| Frontier, Spectrum One, 65, 100, 400 with recognition | 74 |
| Spectrum Two with recognition | 75 |
| **Shimadzu** | |
| 8300, 8400 Series, IRPrestige™-21, IRAffinity-1s | 15 |
| IRPrestige™-21, IRAffinity-1s with recognition (QuickStart) | 16 |
| IRTracer™-100 | 18 |
| IRTracer™-100 with recognition | 19 |
| **Thermo Electron / Nicolet / Mattson** | |
| Infinity, Galaxy, RS Series | 20 |
| Genesis™, Satellite, IR 300 | 21 |
| Impact™ 400, Magna, Protege™, 500 / 700 Series | 40 |
| Avatar™, Nexus™, Nicolet™, iS™10, iS™50 | 40 |
| Model 205/210 | 41 |
| Nicolet iS™5 | 42 |
| Avatar, Nexus, Nicolet Series with recognition (Smart) | 47 |
| **Varian (see Agilent)** | |

## UV-Vis Instrument Codes (XXX)

| | |
|---|---|
| **Agilent/Varian** | |
| Cary 50 | 100 |
| Cary 60 | 111 |
| Cary 100, 300 | 110 |
| Cary 4000, 5000, 6000i | 120 |
| **Jasco** | |
| 600 Series | 600 |
| **Optical Table** | 999 |
| **PerkinElmer** | |
| Lambda 650, 750, 850, 950 and 1050 | 700 |
| Lambda 25, 35, 45 | 730 |
| **Shimadzu** | |
| 1600 and 1700 | 200 |
| 1800 Series | 210 |
| 2600 | 240 |
| 3600 | 220 |
| **Thermo Fisher Scientific** | |
| Evolution 300/600 | 400 |
| Evolution 200 | 410 |

## Helpful Links

Order Form

Quote Request Form

Application Notes

Visit our Website

Contact Us

PIKE TECHNOLOGIES

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