

# Quest™ single reflection ATR accessory

The Quest™ ATR is a single-reflection ATR accessory from Specac designed for routine use in academic and industrial laboratories. With features designed to inspire confidence in the quality of results and reliability in use, this product sets the benchmark in performance and value in ATR-FTIR Spectroscopy.



# Monolithic diamond ATR

Covers the full spectral range of your instrument. Also chemically resilient, scratch resistant, and able to sustain high point loads.

#### Interchangeable crystal pucks

Easily switch ATR crystals and sampling plate options without use of tools.

#### All reflective optics

Increase optical throughput and maximize spectral range.

#### Pressure tower

Reduce sample-to-sample variation with repeatable and reproducible load application pre-set to 40 lbs.





# Sampling options



High chemical resistance, physical hardness, and scratch resistance. Anti-reflection coated as standard to maximise throughput, it is also available as an "extended range" uncoated version for experiments in the Far IR.



#### Zinc Selenide (ZnSe)

Useful for experiments where the phonon bands of diamond would interfere with peak quantification, or as a low cost alternative to diamond.



#### Germanium (Ge)

Has a higher refractive index leading to reduced depth of penetration. This is helpful for highly absorbing samples such as carbon black, or for depth profiling (in comparison to ZnSe or diamond).

#### **Heated ATR puck**



- The heated puck is able to raise the sample to a maximum temperature of 110 °C.
- The temperature is maintained precisely through use of a 4-wire RTD sensor.
- Control of the accessory comes from a USB software interface (available here) with features for temperature programming and datalogging.
- Available in both diamond and ZnSe.



# **Sampling options**



#### Liquids pucks

These pucks have a recessed sample well for improved liquid containment. Useful for sampling of low viscosity liquids which spread out too much on the flat pucks.



# Luer port flow cell

This flow cell is secured using the pressure tower and enables samples to be flowed or injected using the two Luer ports. It has an internal volume of 28 ml.

#### Arrow™ Si consumable ATR

Low cost ATR sampling slides for high throughput liquid sampling applications.



Each slide is a consumable item. They are ideal for forensic and hazardous material identification, where sample crosscontamination must be avoided or where cleaning methods are slow and ineffective.

# **Ordering Information**

# **Complete Quest™ Accessory**

Includes optical base unit, ATR crystal puck, built-in pressure tower, two sampling anvils, purge bellows, and a baseplate matched to your spectrometer

GS10800	Quest ATR with diamond puck
GS10801	Quest ATR with extended range diamond puck
GS10802	Quest ATR with ZnSe puck
GS10803	Quest ATR with Ge puck
GS10894	Quest ATR with heated diamond puck
GS10895	Quest ATR with heated ZnSe puck

**Note:** please specify spectrometer make and model when ordering. Specify country of purchase for correct electrical power supply. Individual Quest<sup>w</sup> ATR pucks

# Arrow™ and other sampling accessories

GS10885	Arrow™ Starter Kit (puck plus 100 slides)
GS10884	Quest ATR with Arrow™ Starter Kit
GS10882	Arrow™ slides refill pack (pack of 100)
GS10816	Specular reflectance puck
GS10822	Luer port liquid flow cell anvil

#### **Spares & Replacements**

Quest optical base	GS10805
Stainless-steel flat pressure anvil	GS10820
Stainless-steel pellet anvil	GS10821
Volatiles cover	GS10825
Purge bellows	GS10707
Luer syringes (for flow cell) 2ml	GS01110

# Individual Quest™ ATR pucks

### Order as additional pucks or in conjunction with the GS10805 optical base unit.

	(AR coated)	Diamond (Extended Range)	Zinc Selenide	(AR coated)	Silicon
Spectral range Refractive index Depth of penetration	<ul> <li>7,800-400 cm<sup>-1</sup></li> <li>2.40</li> <li>2.0 μm</li> </ul>	<ul> <li>10,000-10 cm<sup>-1</sup></li> <li>2.40</li> <li>2.0 μm</li> </ul>	<ul> <li>7,800-500 cm<sup>-1</sup></li> <li>2.41</li> <li>2.0 µm</li> </ul>	<ul> <li>5,500-480 cm<sup>-1</sup></li> <li>4.00</li> <li>0.7 μm</li> </ul>	<ul> <li>8,333-100 cm<sup>-1</sup></li> <li>3.41</li> <li>0.9 µm</li> </ul>
Flat puck	GS10810	GS10811	GS10812	GS10813	GS10819
Liquid puck	GS10860	GS10861	GS10862	GS10863	
Heated puck		GS10890	GS10891		

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