

Ultima Sampling Kit – Highest-Performance, Single Reflection ATR and Backup Accessories to Do it All



FEATURES

- Complete kit for ATR, diffuse reflection, and specular reflection sampling techniques
- High-performance accessories eliminate tedious pellet making
- Analysis of liquids, solids, powders, polymers and thin film samples

In recent years, single reflection ATR measurements have become quite popular for two main reasons – they simplify sample preparation and reduce the complexity of traditional FTIR measurements. This is achieved through the reduction of the sampling area (smaller sample volume/size requirement), ease of cleaning and the introduction of more rigid, diamond-protected sampling interface, capable of withstanding higher pressures and harder samples. The single reflection ATR is capable of analyzing a wide variety of samples – including rigid solids and hard powders – which are difficult to achieve with a multi-reflection ATR. For these reasons, the single reflection ATR has gained the reputation of being a universal sampling device.

Other samples still need to be analyzed by other methods, especially when dealing with poor absorbers, some powders and films. For this reason, PIKE designed an accessory kit built around the MIRacle – Single Reflection ATR, and also included basic diffuse and specular reflection accessories. This combination offers a complete range of sampling devices used in FTIR and covers a wide variety of sampling needs. The Ultima Sampling Kit contains the following accessories:

MIRacle – Single Reflection ATR

Designed to analyze a wide variety of solid and liquid samples. It offers a number of unique features including a universal sampling plate which accommodates liquids, solids and powders, a small sampling interface (1.8 mm) making the analysis of small and/or awkward samples easy, and interchangeable sampling plates. All the above options allow for the best selection of an appropriate spectral range, and a configuration which matches the optical, physical and chemical properties of analyzed samples. The patented optical design of the accessory offers the highest energy throughput and maximum sensitivity. The MIRacle in this kit is equipped with a pressure clamp and purge attachments.

EasiDiff – Diffuse Reflection Accessory

An ideal product for the analysis of powders and intractable solids. With a set of convenient tools for sample preparation, this compact, high-performance accessory provides outstanding collection efficiency.

30Spec – Specular Reflection Accessory

A great accessory for the analysis of thin organic films deposited on reflective surfaces and a myriad of surface coatings and surface treatments. The 30Spec is slide-mounted and comes with a set of three masks which allow for the isolation of small, predetermined spots on larger samples, and the analysis of small samples.

Please refer to the appropriate sections of the catalog to review the theory and detailed descriptions of kit components.

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
050-20XX	Ultima Sampling Kit Includes: MIRacle – single reflection ATR with ZnSe crystal, universal configuration for solid and liquid analysis, and high-pressure clamp EasiDiff – diffuse reflection accessory with sampling tools, two micro and two macro sample cups, EasiPrep sample preparation kit, alignment mirror, mortar and pestle, and KBr 30Spec – specular reflection accessory with set of three masks for control of sampling spot size
050-20XX-DI	Ultima Sampling Kit with Diamond ATR Includes: MIRacle – single reflection ATR with diamond/ZnSe crystal, universal configuration for solid and liquid analysis, and high-pressure clamp EasiDiff – diffuse reflection accessory with sampling tools, two micro and two macro sample cups, EasiPrep sample preparation kit, alignment mirror, mortar and pestle, and KBr 30Spec – specular reflection accessory with set of three masks for control of sampling spot size

Notes: Replace XX with your spectrometer's Instrument Code. [Click for List >](#)
Add -GE or -SI to part number 050-20XX to substitute Germanium or Silicon MIRacle crystal plates.