

Agilent Cary FTIR Spectrometer Equivalence Guide

Introduction

The Agilent Cary 630 FTIR spectrometer and Agilent Cary 635 FTIR spectrometer have equivalent performance specifications, capabilities, and system features. Both systems are supported by the optional Agilent MicroLab Pharma data integrity software package, and dedicated instrument validation software, which includes pharmacopeia test suites.

The following tables provide a comparison of the regulatory and system features of the Cary 630 FTIR and the Cary 635 FTIR spectrometer systems.

Table 1. Comparison of how the Agilent Cary 630 FTIR and Agilent Cary 635 FTIR spectrometer systems meet the hardware and software requirements for FTIR systems in regulatory environments.

Regulation	Requirement	Cary 630 FTIR System	Cary 635 FTIR System
Global regulations for data integrity such as 21 CFR Part 11 and EU Annex 11	Data security in a protected database for application method and result files	✓	✓
	Data integrity and traceability with system and application audit trails	✓	✓
	Electronic signatures	✓	✓
	Access only for registered users	✓	✓
	Configurable levels of application access and user permissions for efficient workflows	✓	✓
	Archival capabilities	✓	✓
European Pharmacopeia (EuPh)*	Wavenumber Accuracy	✓	✓
	Spectral Resolution	✓	✓
United States Pharmacopeia (USP)	Wavenumber Accuracy	✓	✓
Indian Pharmacopeia (IP)	Wavenumber Accuracy	✓	✓
	Spectral Resolution	✓	✓
Japanese Pharmacopeia (JP)	Wavenumber Accuracy	✓	✓
	Wavenumber Precision	✓	✓
	Spectral Resolution	✓	✓
	Transmittance Reproducibility	✓	✓

* Includes the different performance criteria for transmission and ATR measurement modes

Table 2. Comparison between the Cary 630 FTIR and the Cary 635 FTIR spectrometer systems showing equivalent system features and capabilities.

System Feature	Cary 630 FTIR System	Cary 635 FTIR System
Instrument Type	Portable benchtop Fourier Transform Infrared (FTIR) spectrometer	Portable benchtop Fourier Transform Infrared (FTIR) spectrometer
Optical System (Engine)	Zinc selenide (ZnSe) optics Potassium bromide (KBr) optics	Zinc selenide (ZnSe) optics Potassium bromide (KBr) optics
Spectral Range	5,100 to 600 cm^{-1} with ZnSe optics 7,000 to 350 cm^{-1} with KBr optics	5,100 to 600 cm^{-1} with ZnSe optics 7,000 to 350 cm^{-1} with KBr optics
System Design	Fully interchangeable, modular system with RFID module recognition.	Fully interchangeable, modular system with RFID module recognition.
Sampling Modules	Transmission Module	Transmission Module
	Diamond (Di) Single-Reflection ATR Module	Diamond (Di) Single-Reflection ATR Module
	Zinc selenide (ZnSe) Single-Reflection ATR Module	Zinc selenide (ZnSe) Single-Reflection ATR Module
	Germanium (Ge) Single-Reflection ATR Module	Germanium (Ge) Single-Reflection ATR Module
	Multireflection ATR Module with ZnSe crystal	Multireflection ATR Module with ZnSe crystal
	DialPath Module (30 to 1,000 μm)	DialPath Module (30 to 1,000 μm)
	Tumbler Module (100 to 1,000 μm)	Tumbler Module (100 to 1,000 μm)
	Diffuse Reflectance Module	Diffuse Reflectance Module
	45-degree Specular Reflectance Module	45-degree Specular Reflectance Module
	10-degree Specular Reflectance Module	10-degree Specular Reflectance Module
Application Software	MicroLab software suite – MicroLab PC – MicroLab Lite – MicroLab OQ – MicroLab Quant MicroLab Expert*	MicroLab software suite – MicroLab PC – MicroLab Lite – MicroLab OQ – MicroLab Quant MicroLab Expert*
Data Integrity Software	MicroLab Pharma	MicroLab Pharma

* Not supported under MicroLab Pharma

www.agilent.com/chem/cary635

DE-016718

This information is subject to change without notice.

© Agilent Technologies, Inc. 2026
Printed in the USA, August 18, 2026
5994-9399EN