

READY

Indatech's multitasking software

- Control of all INDATECH instruments
- Importation of chemometric models
- Communication via OPC-UA/TCP-IP
- 21 CFR part 11 compliant
- Simplified mode for operators



For the biotechnological and pharmaceutical industries, Indatech - Chauvin Arnoux Group **proposes several innovative spectroscopic analyzers** for in-line assessment of your product's critical physical and chemical quality criteria in real time. From upstream to downstream, and not forgetting the lyophilization stage, **our experts offer you the best possible cost/performance trade-off** by taking your objectives into account: **speeding up development of the process or improving and automating production**. Our solutions, which are fully compatible with automation thanks to their OPC UA communication capabilities, **have already been integrated in the systems of the major players** such as GEA, Pharmatechnology and Proditex.

Multitasking software

A versatile GUI for collecting, visualizing and processing spectroscopic data transmitted by the measuring instrument, from the laboratory through to the production line.



Adapted for each INDATECH solution

Software versions for the whole range of INDATECH spectroscopy instruments: **Asuryan Ready** (UV VIS), **Viserion Ready** (Raman), **SRS Ready** (NIR with SAM SPEC technology).

Data processing

Ability to use the full power of chemometric analysis:

- Possibility of directly importing models from Eigenvector Research's PLS_Toolbox
- Ability to work with the SIMCA suite from Sartorius
- Display of the predictions in real time

State at delivery

The Ready software is delivered with all the instruments in the INDATECH range to allow control of the instrument and interaction with the developers, operators or other machines.

Control by automation

The software includes advanced communication protocols such as OPC-UA or TCP IP. In this way, it is possible to control and command the instruments remotely by means of automation or via advanced production software such as SIPAT, SyntQ or other SCADA software. Indatech's instruments thus become totally autonomous on a production unit, saving time for the operator.

Compatible with pharma standards

Data are stored in a proprietary binary data format (IDM) and can be exported to the standard SPC (or csv) format. Tools are also provided for instantaneous extraction of the data and activity reports as well as management of the access rights or electronic signatures, all in conditions compliant with the 21 CFR part 11 standard.



Data management

- A system for modulating the data acquisition parameters:
 - type of acquisition (one-off, periodic or configured via recipe)
 - integration time
 - number of scans
- Data storage in a proprietary binary format containing the various data of interest (references, spectra, calculated process values for the object, metadata, experimental environment, batch no.)
- Possibility of exporting in the universal SPC and CSV format
- A data acquisition and recording procedure designed for compatibility with the 21 CFR part 11 standard
- Generation of end-of-batch reports
- Creation of univariate models



Generation of recipes for operators

- Definition of the acquisition and display parameters
- Application of univariate and multivariate (PLS, PCA, SVM, ANN) models
- Definition of the acceptance limits for each of the imported models
- Automatic loading of the parameters for the operator

Human/machine interface



Data display

- Possibility of viewing and monitoring the dark, intensity, your QStéphane, transmittance and absorbance
- Possibility of displaying a history of the most recent spectra
- Possibility of multiscreen configuration
- Possibility of displaying the critical parameters of the chemometric models (predicted value, Hotelling's T^2 , Q residuals)

Qualification, maintenance and control tools

- Qualification of the equipment according to the applicable USP standards
- Tracking the status of the elements with a limited life span (e.g. light source)
- A tool for routine verification of the system with an alarm for checking the qualification of the equipment, and your experiments
- Export of Performance Qualification reports

Overview

System	Technology	USP qualification	21 CFR part 11 (option)	Importation of models		Communication mode		
				PLS Toolbox	SIMCA (option)	OPC-UA (option)	TCP-IP	I/O
Asuryan	UV-Visible	USP 857	Yes	Yes	Yes	Yes	No	Yes
Hyternity	NIR	USP 856	Yes	Yes	Yes (low speed)	Yes (low speed)	Yes	Yes
Viserion	Raman	USP 858	Yes	Yes	Yes	Yes	Yes	No

Multipurpose software

