

## PEAXACT 5 Product List

Product	License Type	License Option	Code
<b>Permanent Licenses</b>			
PEAXACT Desktop App	Permanent	Individual	PXT500-I
PEAXACT Desktop App	Permanent	Group	PXT500-G
PEAXACT Desktop App	Permanent	Network	PXT500-N
PEAXACT ProcessLink	Permanent	Automation	PXT501
PEAXACT AppServer	Permanent	Automation	PXT502
<b>Term Licenses / Subscriptions</b>			
PEAXACT Desktop App	Subscription (1 year)	Individual	PXT504-I
PEAXACT Desktop App	Subscription (1 year)	Group	PXT504-G
PEAXACT Desktop App	Subscription (1 year)	Network	PXT504-N
PEAXACT ProcessLink	Subscription (1 year)	Automation	PXT508
PEAXACT AppServer	Subscription (1 year)	Automation	PXT509
<b>Special Offers for Universities</b>			
PEAXACT Desktop App	University (1 year)	Individual	PXT505-I
PEAXACT Desktop App	University (1 year)	Group	PXT505-G
PEAXACT Desktop App	University (1 year)	Network	PXT505-N
PEAXACT Desktop App	University (4 months)	Individual	PXT506
<b>Customizable Licenses</b>			
PEAXACT Custom Desktop App	Permanent	Individual/Group/Network	PXT503
+ Model Editor			PXM51
+ Univariate Calibration Builder			PXM52
+ PLS Calibration Builder			PXM53
+ Classification Builder			PXM54

Choose a license option. N = number of purchased licenses.

License Option	Intended For	#Users	#Computers
Individual	One designated named user	1	2
Group	Users sharing N local computers (1 user per computer at a time)	Unlimited	N
Network	Users sharing a license over the network (N concurrent users)	$N \geq 2$	Unlimited
Automation	Any number of concurrent users on N local computers	Unlimited	N



## PEAXACT Desktop App

The PEAXACT Desktop App is an interactive Windows app for quantitative spectroscopy. It provides a full tool set for data-driven and model-based analysis of unknown samples, supporting the user with an intuitive workflow to simplify data modeling, calibration, and classification. PEAXACT combines all relevant analysis methods in a single app and is the only program to offer innovative Spectral Hard Modeling methods; a powerful contribution to chemometrics.

### Analyzer Engine

Management, visualization, and analysis of spectra.

- Data Management: simplify your work by organizing big data with the Data Table Editor. Combine your measured spectra with associated numerical and categorical feature values (e.g., concentrations, temperatures, measurement times, product categories) for data visualization, calibration, classification, documentation, and other operations.
- Visualization: explore your data with customizable 2D and 3D plots, e.g., stack plots, surface plots, correlation plots, dendrograms, scores plots.
- Analysis: convert your spectra into concentrations and other values of interest to gain a deeper understanding of your measurement system. The following methods are available:
  - Peak Picking
  - Peak Integration
  - Principle Component Analysis (PCA)
  - Cluster Analysis
  - Component Number Analysis
  - Multivariate Curve Resolution (MCR)
  - Hard Modeling Factor Analysis (HMFA)
  - Peak Fitting
  - Component Fitting
  - Univariate Prediction
  - Partial Least Squares (PLS) Prediction
  - Identification with Lookup Tables
  - Identification with Discriminant Models
  - User-defined Custom Results

### Model Editor

Creation and modification of models.

- Pretreatment Model: manipulate samples through resampling, range selection, unit conversion, alignment, baseline correction, smoothing, derivatives, and standardization, as well as NMR-specific apodization and phase correction.
- Integration Model: calculate peak areas from non-overlapping signals.
- Hard Model: fit peaks to deconvolve complex signals.
- Calibration Model: see Calibration Builder.
- Classification Model: see Classification Builder.
- Custom Model: define your own custom results to extend the built-in analyses.

### Calibration Builder and Classification Builder

Training and validation of calibration models for the prediction of numerical features, and classification models for the identification of categorical features.

- Univariate Calibration Builder: enables the training of univariate regression functions.
- PLS Calibration Builder: enables the training of Partial Least-Squares models.
- Classification Builder: enables the training of lookup tables and discriminant models.



## PEAXACT ProcessLink

PEAXACT ProcessLink is an interactive Windows app to configure folder monitoring, analyze incoming files with PEAXACT models, and send analysis results to various outputs, including a real-time chart, a text file, and an OPC UA server. The ProcessLink enables you to link PEAXACT data analysis to any measurement instrument and link the results to any process control system.

### **Device Independence**

ProcessLink works with any instruments that writes spectrum files. Many file formats are supported already and ProcessLink can be extended for new formats.

### **Real-time Chart**

ProcessLink analyzes files in real-time and displays a trend chart of the most recent results. Warning and error limits can be specified to quickly identify problematic results.

### **OPC UA Server**

ProcessLink relies on the newest OPC UA standard to make results available to clients in the local network or over the internet. The built-in OPC UA server complies highest security requirements by means of data encryption and digital signing.

### **AppServer Included**

ProcessLink is built upon the PEAXACT AppServer. A license of the AppServer is included.



## PEAXACT AppServer

The PEAXACT AppServer provides a non-interactive application programming interface (API) for integrating PEAXACT as a back-end predictor with your own applications or with third-party applications.

### .NET & COM APIs

The PEAXACT AppServer runs as a Windows Service and comes with a .NET Framework 4.5 API (AnyCPU) for software development in C# and VB.NET with Microsoft Visual Studio, or in any programming language supporting .NET objects, e.g., Python for .NET, MATLAB, LabVIEW, and many others. A COM API (32-bit and 64-bit) is also provided for backwards compatibility and its widespread support by third-party applications, including e.g., Microsoft Visual Basic for Applications (VBA) in MS Excel, or Visual Basic Script (VBS).

### PEAXACT-ready Software Applications

The following (non-exhaustive) list includes third-party software applications that support PEAXACT as back-end predictor. Note that when a third-party predictor is required, it must be ordered directly from the third party. Also note that some third-party predictors operate independently and do not require a separate AppServer.

Third-party software (company)	Requires AppServer	Requires third-party predictor
HoloPro (Kaiser Optical Systems)	•	
HyperFlux PRO Plus (Tornado)		•
MultiSpec Pro II (tec5)	•	•
Optoquant (Optoquant)		•
OPUS Process (Bruker Optics)	•	
Process Guardian (Tornado)		•
Process Pulse II (AspenTech)	•	•
Raman RunTime (Endress+Hauser)		•
SIPAT (Siemens)	•	•
SpinSolve (Magritek)	•	•
synTQ (Optimal)	•	•

## PEAXACT Software Maintenance Service

Software Maintenance Service (SMS) is an annual subscription to a service package:

- Free major upgrades
- Technical Support
- Immediate hot-fixes or interim solutions for software problems
- Periodic maintenance updates

The first year of SMS is included with new permanent licenses. SMS is always included with license subscriptions.

### Free Major Upgrades

With uninterrupted subscription, major upgrades will be **free of charge**.

### Technical Support

Our support engineers provide solutions to all technical issues you are facing with PEAXACT, from installation to complex analysis tasks.

### Hot Fixes

If you encounter a software bug which prevents you from doing your work, you can expect our Technical Support to provide an immediate hot fix. Often you can download a hot fix the very next day and do not have to wait for the next regular maintenance update.

### Maintenance Updates

Maintenance updates are released several times a year. This ensures continuous bug fixing and improvements. See [peaxact.com/whatsnew](https://peaxact.com/whatsnew).