

# Unscrambler Predictor



*Enabling*

## Online Predictions

**Process Control | Process Monitoring | Quality Control**

The Unscrambler Predictor is a CAMO initiative designed to make models generated off-line using The Unscrambler®, more widely accessible to third party instruments and control systems. The Unscrambler Predictor can be interfaced into an existing software platform to provide users all of the predictive and diagnostic tools found in The Unscrambler®, configured in a way that allows real time quality control.

# Unscrambler Predictor

## Standardize prediction values

Transfer one single model across many sites or over different equipment in the same site.



## Automate operations

Allows reduction of manual calculations and testing procedures, therefore reducing the risk of error.



## Customise solutions

Can be customised in-house or using CAMO's extensive expertise.



## Reduce deployment & training costs

Models developed in a central laboratory or technical group can be seamlessly transferred with no prior experience with The Unscrambler®. This leads to lower manufacturing costs and maximises ROI.

## Features

- Perform real time predictions from data obtained from laboratory or process equipment
- DLL function calls(32 bit only) / DDE communication(16/32 bit)
- Automatic data preprocessing, supports all pretreatments available in The Unscrambler®
- Programmers reference manual available for in-house customisation
- Supports PCR and PLS models built in The Unscrambler® 7.x + higher
- Supports predictions from MLR models **New**
- Supports The Unscrambler®'s merged model file format for MLR, PCR and PLS-R. This format includes all model and pretreatment sub files into a single file. This facilitates storage and re-location of The Unscrambler® model files for usage in Unscrambler Predictor **New**
- Outputs Hotelling T2 statistics to help discover erroneous or outlying samples **New**
- Can be used together with Unscrambler Classifier (for online classification)
- Runs on Windows 98, Me, XP, Vista or Windows NT, 2000, 2003

## Application areas

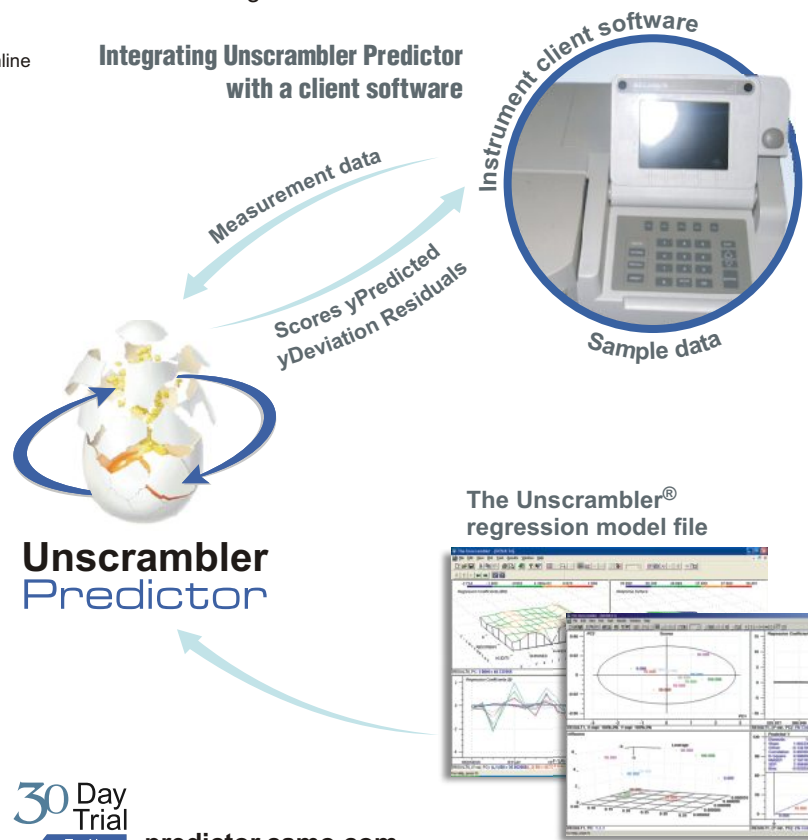
The Unscrambler Predictor is an easy to use, software package enabling real time quality control measurements and Multivariate Statistical Process Control (MSPC). It has proven to be ideal for capturing data from various instruments and process outputs, moving away from univariate approaches to a multivariate view of quality. The Unscrambler Predictor can be used for

- Providing quality measurements based on outputs of process spectrometers or other multichannel instruments
- Detection of process deviations and faults before they become a problem
- Pharmaceutical applications using Process Analytical Technology (PAT) and Quality by Design (QbD) initiatives
- Reaction and process monitoring in the petrochemical, agriculture and food sectors and for environmental monitoring

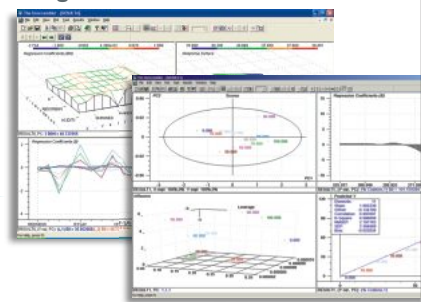
## How to implement Unscrambler Predictor?

The Unscrambler Predictor "packages" an Unscrambler model into a DLL (32 bit only) or Dynamic Data Exchange (DDE, 16 and 32 bit) protocol. Through these protocols, third party software, whether custom built (C, C++, Fortran, Visual Basic etc) or proprietary, can interface with the Unscrambler Predictor for the generation of real time prediction values and associated diagnostics.

### Integrating Unscrambler Predictor with a client software



### The Unscrambler® regression model file



30 Day Trial

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[predictor.camo.com](http://predictor.camo.com)



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