SPSS Modules Features

Core System Functionality (included in every license)

Data access and management

- Data Prep features: Define Variable properties tool; copy data properties tool, Visual Bander, Identify Duplicate cases; Date/Time Wizard
- Data Restructure Wizard
  - single record to multiple records
  - multiple records to single record
- Direct Excel data access
- Export data to SAS and current versions of Excel
- Export to Database Wizard
- Import/export to/from Dimensions
  - (mr Interview and mr Heritage products)
- Long Variable names
- Longer value labels
- Multiple datasets can be run in one SPSS session
- ODBC Capture - DataDirect Drivers
- OLE DB data access
- SAS 7/8/9 data files including compressed files)
- Text Wizard
- Unicode support
- Very long text strings

Graphs

- Auto and Crosscorrelation Graphs
- Basic Graphs
- Chart Gallery
- Chart Looks
- ChartBuilder UI for commonly used charts
- Charts for multiple response variables
- Graphics Production Language for custom charts
- Interactive Graphs - Scriptable
- Overlay and dual Y charts
- Panelled charts
- ROC analysis
- Time Series Charts

Output

- Case Summaries
- Codebook
- Enhanced control over output when exporting to MS Office
- Export model as XML to SmartScore
- Export to PDF
- Export to Word/Excel/PowerPoint
- HTML output
- Improved performance for Large Pivot Tables
- OLAP Cubes/Pivot Tables
- Output Management System
- Output Scripting

- Reports Summaries in Rows & Columns
- Search and replace
- Smartreader
- Table to Graph Conversion

Data Editor

- Custom Attributes for user-defined meta data
- Spell Checker
- Splitter controls
- Variable Sets for wide data

Help

- Application Examples
- Index
- Statistics Coach
- Tutorial

Extended Programmability

- Custom UI Builder enhancements (work seamlessly with Python and R, and can be used in Modeler)
- Flow control or syntax jobs
- Partial Least Squares regression
- Python for front end scripting
- SPSS equivalent of the SAS DATA STEP
- Support for R algorithms and graphics
- User defined procedures

Syntax Editor – only XMLs for supported commands

SPSS Statistics Base

Statistics

- ANOVA (in syntax only)
- Cluster
- Correlate- bivariate, partial, distances
- Crosstabs
- Define variable sets
- Descriptive Ratio Statistics (PVA)
- Descriptives
- Discriminant analysis
- Enhanced Model Viewer On Two-Step
- Cluster and New Non-parametrics
- Explore
- Factor analysis
- Frequencies
- Improved performance for Frequencies,
- Crosstabs, Descriptives (Statistics Base Server)
- Matrix Operations
- Means
- Nearest Neighbour Analysis
- New Non-Parametric Tests one way ANOVA
- Ordinal Regression (PLUM)

- Ordinary Least Squares Regression
- PP Plots
- QQ Plots
- Ratio
- Reliability and ALSCAL multidimensional scaling
- ROC Curve
- Rule Checking on Secondary SPC Charts
- Summarize data
- T Tests - Paired Samples, Independent Samples, One-Samples
- Two-Step Cluster: categorical and continuous data/large data sets

Graphs

- Legacy Chart Dialogs

Multithreaded algorithms

- SORT

Syntax editor

SPSS Forecasting

- Core System Capabilities
- Auto Regressive Integrated Moving Average
- Autoregression
- Expert Modeler
- Exponential Smoothing Methods
- Forecast multiple series (outcomes) at once
- Seasonal Decomposition
- Spectral Analysis

SPSS Regression

- Core System Capabilities
- Binary Logistic Regression
- Logit Response Models
- Multinomial Logistic Regression
- Nonlinear Regression
- Probit Response Analysis
- Two Stage Least Squares
- Weighted Least Squares

SPSS Exact Tests

- >30 Tests for nonparametric & categorical data
- 1-Sample Chi-square test
- 1-Sample Kolmogorov-Smirnov test
- 1-Sample Wald-Wolfowitz runs test
- 2-Sample Kolmogorov-Smirnov test
- Binomial test
- Cochran's Q test
- Contingency coefficient
- Cramer's V
- Fisher's exact test Somers' D—symmetric and asymmetric

- Friedman test
- Gamma
- Goodman and Kruskal Tau
- Jonckheere-Terpstra test
- Kappa
- Kendall's coefficient of concordance
- Kendall's Tau-b and Tau-c
- Kruskal-Wallis test
- Likelihood ratio test
- Linear-by-linear association test
- Mann-Whitney U or Wilcoxon rank-sum W test
- Marginal homogeneity test
- McNemar test
- Median test
- Pearson Chi-square test
- Pearson's R
- Phi
- Sign test
- Spearman correlation
- Uncertainty coefficient—symmetric or asymmetric
- Wald-Wolfowitz runs test
- Wilcoxon signed-rank test

SPSS Advanced Statistics

General Linear Modelling (GLM)

- General Factorial
- Multivariate (MANOVA)
- Repeated Measures
- Variance Components

Generalised Linear Models and Generalised Estimating Equations

- Gamma Regression
- Poisson Regression
- Negative Binomial

GENLOG for Loglinear and Logit

Hierarchical Loglinear Models

Kaplan Meier

Linear Mixed-level Models (aka Hierarchical Linear Models)

Survival

Variance Component Estimation

SPSS Categories

ANACOR

- Correspondence analysis

ATPCA

- Principal components analysis for categorical data (replaces PRINCALS)

CATREG

- Ridge Regression, Lasso, Elastic Net

CORRESPONDENCE

OVERALS

- Nonlinear canonical correlation

PROXSCAL

- multidimensional scaling for individual differences scaling with constraints

PREFSCAL

- Preference scaling (multidimensional unfolding)

Multiple Correspondence Analysis

SPSS Missing Values

Data Patterns Table

Imputation with Means Estimation or Regression

Listwise and Pairwise Statistics

Missing Patterns Table

Multiple imputation of missing data

Pooling

SPSS Custom Tables

Core system capabilities

35 descriptive statistics

Drag and drop interface

Inferential statistics

Nested Tables

Place totals in any row, column, or layer

Post Computed Categories

Put multiple variables into the same table

Sig tests on multiple response variables

Significance test in Custom Tables main table

Specialized multiple response set tables

Syntax converter

Table preview

SPSS Complex Samples

Core system capabilities

CS Cox Regression (also multithreaded)

CS Descriptives

CS General Linear Models

CS Logistic Regression

CS Ordinal Regression

CS Selection

CS Tabulate

SamplingWizard/Analysis Plan Wizard

SPSS Decision Trees

C&RT

CHAID

Core system capabilities

Exhaustive CHAID

QUEST

SPSS Data Preparation

Enhanced Model Viewer for Automated Data Preparation

Validate data

- Streamline the process of validating data before analysing it

Anomaly detection

- Identify unusual cases in a multivariate setting

Optimal Binning

SPSS Neural Networks

Multilayer Perception

Radial Basis Function

SPSS Conjoint

CONJOINT

- Estimate Utilities

ORTHOPLAN

- For conjoint analysis

PLANCARDS

SPSS Direct Marketing

Core system capabilities

Cluster Analysis

Contact Profiling

Control Package Test

Propensity to Purchase

RFM analysis- recency, frequency, monetary

Zip code response

SPSS Bootstrapping

Sampling and pooling

Descriptive Procedures that can be bootstrapped

- Correlations/Nonparametric Correlations
- (Statistics Base)
- Crosstabs (Statistics Base)
- Descriptives (Statistics Base)
- Examine (Statistics Base)
- Frequencies (Statistics Base)
- Means (Statistics Base)
- Partial Correlations (Statistics Base)
- T-tests (Statistics Base)

Modelling Procedures that can be bootstrapped

- Cox Regression (Advanced Statistics)
- Discriminant (Statistics Base)
- GENLIN (Advanced Statistics)
- GLM (Advanced Statistics)
- Linear Mixed Models (Advanced
- Statistics)
- Logistic Regression (Regression)
- Nominal Regression (Regression)
- Oneway (Statistics Base)
- Binary Multinomial Logistic ordinal
- regression (Statistics Base)
- Regression (Regression)
- UniAnova (Statistics Base)

SPSS Amos

Bayesian estimation

Confirmatory factor analysis

Estimation of categorical and censored data

Latent Class Analysis

Structural equation modeling/Path analysis