



* New or Improved

Assistant

- Measurement systems analysis
- Capability analysis
- Graphical analysis
- Hypothesis tests
- Regression
- DOE
- Control charts

Graphics

- Graph Builder*
- Tabulated statistics*
- Pareto Chart*
- Binned scatterplots, boxplots, bubble plots, bar charts, correlograms, dotplots, heatmaps, histograms, matrix plots, parallel plots, scatterplots, time series plots, etc.
- Contour and rotating 3D plots
- Probability and probability distribution plots
- Automatically update graphs as data change
- Brush graphs to explore points of interest
- Export: TIF, JPEG, PNG, BMP, GIF, EMF

Basic Statistics

- Descriptive statistics
- One-sample Z-test, one- and two-sample t-tests, paired t-test
- One and two proportions tests
- One- and two-sample Poisson rate tests
- One and two variances tests
- Correlation and covariance
- Normality test
- Outlier test
- Poisson goodness-of-fit test

Regression

- Cox regression
- Linear regression
- Nonlinear regression
- Binary, ordinal and nominal logistic regression
- Stability studies
- Partial least squares
- Orthogonal regression
- Poisson regression
- Plots: residual, factorial, contour, surface, etc.
- Stepwise: p-value, AICc, and BIC selection criterion
- Best subsets
- Response prediction and optimization
- Model validation
- Multivariate Adaptive Regression Splines

Analysis of Variance

- ANOVA
- General linear models
- Mixed models
- MANOVA
- Multiple comparisons
- Response prediction and optimization
- Test for equal variances
- Plots: residual, factorial, contour, surface, etc.
- Analysis of means

Measurement Systems Analysis

- Data collection worksheets
- Gage R&R Crossed
- Gage R&R Nested
- Gage R&R Expanded
- Gage run chart
- Gage linearity and bias
- Type 1 Gage Study
- Attribute Gage Study
- Evaluate Measurement Process (EMP Crossed)*
- Attribute agreement analysis

Quality Tools

- Run chart
- Pareto chart
- Cause-and-effect diagram
- Variables control charts: XBar, R, S, XBar-R, XBar-S, I, MR, I-MR, I-MR-R/S, zone, Z-MR
- Attributes control charts: P, NP, C, U, Laney P' and U'
- Time-weighted control charts: MA, EWMA, CUSUM
- Multivariate control charts: T2, generalized variance, MEWMA
- Rare events charts: G and T
- Historical/shift-in-process charts
- Box-Cox and Johnson transformations
- Individual distribution identification
- Process capability: normal, non-normal, attribute, batch
- Nonparametric capability analysis*
- Automated capability analysis*
- Process Capability Sixpack™
- Tolerance intervals
- Acceptance sampling and OC curves
- Multi-Vari chart
- Variability chart

Design of Experiments

- Definitive screening designs
- Plackett-Burman designs
- Two-level factorial designs
- Split-plot designs
- General factorial designs
- Response surface designs
- Mixture designs
- D-optimal and distance-based designs
- Taguchi designs
- User-specified designs

- Analyze binary responses
- Analyze variability for factorial designs
- Botched runs
- Effects plots: normal, half-normal, Pareto
- Response prediction and optimization
- Plots: residual, main effects, interaction, cube, contour, surface, wireframe

Reliability/Survival

- Parametric and nonparametric distribution analysis
- Goodness-of-fit measures
- Exact failure, right-, left-, and interval-censored data
- Accelerated life testing
- Regression with life data
- Test plans
- Threshold parameter distributions
- Repairable systems
- Multiple failure modes
- Probit analysis
- Weibayes analysis
- Plots: distribution, probability, hazard, survival
- Warranty analysis

Power and Sample Size

- Sample size for estimation
- Sample size for tolerance intervals
- One-sample Z, one- and two-sample t
- Paired t
- One and two proportions*
- One- and two-sample Poisson rates
- One and two variances
- Equivalence tests
- One-Way ANOVA
- Two-level, Plackett-Burman and general full factorial designs
- Power curves

Predictive Analytics

- Automated Machine Learning
- CART® Classification
- CART® Regression
- MARS®
- Random Forests® Classification
- Random Forests® Regression
- TreeNet® Classification
- TreeNet® Regression

Multivariate

- Principal components analysis
- Factor analysis
- Discriminant analysis
- Cluster analysis
- Correspondence analysis
- Item analysis and Cronbach's alpha
- Multivariate Adaptive Regression Splines

Time Series and Forecasting

- Time series plots
- Trend analysis
- Decomposition
- Moving average
- Exponential smoothing
- Winters' method
- Auto-, partial auto-, and cross correlation functions
- ARIMA
- Box-Cox Transformation*
- Augmented Dickey-Fuller Test*
- Forecast with Best ARIMA Model*

Nonparametrics

- Sign test
- Wilcoxon test
- Mann-Whitney test
- Kruskal-Wallis test
- Mood's median test
- Friedman test
- Runs test

Equivalence Tests

- One- and two-sample, paired 2x2 crossover design

Tables

- Chi-square, Fisher's exact, and other tests
- Chi-square goodness-of-fit test
- Tally and cross tabulation

Simulations and Distributions

- Random number generator
- Probability density, cumulative distribution, and inverse cumulative distribution functions
- Random sampling
- Bootstrapping and randomization tests

Macros and Customization

- Customizable menus and toolbars
- Extensive preferences and user profiles
- Powerful scripting capabilities
- Python integration
- R integration

SYSTEM REQUIREMENTS

Minitab 22.1 Desktop (Windows only)

Operating System: Windows 10 or Windows 11

RAM*: 4 GB of memory or more recommended

Processor: 64-bit, x86 processor required (ARM processors are not supported)

Hard Disk Space: 2 GB (minimum) free space available

Screen Resolution: 1024 x 768 or higher

Connectivity: An internet connection is required for activation of trial and single-user licenses

Browser: A web browser is required for Minitab Help. Chrome or Chromium Edge is recommended.

Additional required software will be installed with the application: Microsoft Visual C++ Redistributables for Visual Studio 2022

*Memory recommendations depend on data size.

Minitab Web

Connectivity: An internet connection is required

Supported Browsers: Chrome, Chromium Edge, or Safari

Multi-User License Manager

Multi-User desktop license installations also require the Minitab License Manager (**verify you have the latest version of the License Manager**), which has the following recommended system requirements:

Operating System: Windows Server 2019, Windows Server 2022, or Windows 10, Windows 11. It is best practice to run license servers on a server-based OS.

Hard Disk Space: 100 MB (minimum); dependent on log file settings

Connectivity: At least one enabled network interface card