



Comparison of Origin and OriginPro

OriginPro provides all of the features of Origin, plus additional analysis tools and capabilities. The following tables provide comparisons between Origin and OriginPro in such areas as curve fitting, peak analysis, statistics, signal analysis, and image handling.

| CURVE FITTING | | ORIGIN | ORIGINPRO |
|--------------------------|--|----------|-----------|
| | Linear Regression | ✓ | ✓ |
| | Linear Fit with X Error | | ✓ |
| | Confidence Ellipse for Linear Fit | ✓ | ✓ |
| LINEAR AND POLYNOMIAL | Polynomial Regression | ✓ | ✓ |
| FITTING | Multiple Linear Regression | ✓ | ✓ |
| | Partial Leverage Plots in Multiple Regression | √ | ✓ |
| | Residual Analysis | ✓ | ✓ |
| | Fitting Multiple Datasets | ✓ | ✓ |
| NONLINEAR FITTING | Built-in Fitting Function and User- defined Fitting Function | √ | ✓ |
| | Parameter Initialization and Derived Parameter Definition | ✓ | ✓ |
| | Bounds and Constraints | ✓ | ✓ |
| | Weighted Fitting | ✓ | ✓ |
| | Fitting with Y Error | ✓ | ✓ |
| | Fitting with X and Y Errors (Orthogonal Regression) | | ✓ |
| | Global Fit with Parameter Sharing | √ | ✓ |
| | Fitting Replica Data | ✓ | ✓ |
| | Residual Analysis | ✓ | ✓ |
| | Fitting with Implicit Functions (Orthogonal Distance Regression) | | ✓ |
| | Fitting Comparison | | ✓ |
| | Surface Fitting | | ✓ |

| MATHEMATICS | | ORIGIN | ORIGINPRO |
|---|--|----------|-----------|
| SIMPLE MATHEMATICS OPERATIONS | Simple Mathematics Operations on or Between Datasets √ | | √ |
| | Set Column or Matrix Values by Using Mathematics Operations | ✓ | √ |
| | Normalization | √ | √ |
| | 1D Interpolation and Extrapolation | √ | √ |
| | Interpolation and Extrapolation of Y From X | √ | √ |
| INTERPOLATION AND | Trace Interpolation on XY Data | √ | √ |
| EXTRAPOLATION | Trace Interpolation on XYZ Data | √ | √ |
| | 2D Interpolation and Extrapolation | ✓ | ✓ |
| | 3D Interpolation | √ | √ |
| DIFFEREN- TIATION AND INTEGRATION | Numerical Differentiation | √ | √ |
| | 1D Numerical Integration | √ | √ |
| | 2D Volume Integration | | √ |
| AREA CALCULATION | Polygon Area | ✓ | ✓ |
| | XYZ Surface Area | | ✓ |
| | Matrix Surface Area | | √ |
| OTHERS | Average Multiple Curves | √ | √ |
| | Inverse of a Matrix | √ | √ |



| Basic Descriptive Statistics 1 D and 2D Frequency Counts Correlation Coefficient Discrete Frequency Distribution Fit Normality Test (Shaprio-Wilk, Lillefors, Kolmogorov-Smirnov, Anderson-Darling, D'Agostino-K S quared, Chen-Shapro) Statistics Charts: Histogram, Box Chart, Scatter Matrix, QC Chart, Probability Plot, Q-Q Plot, and Pareto Chart Grubbs Test and Q-test to Detect Outliers One Sample and Two-Sample Hest Two Sample and Two-Sample Hest, Pair-Sample Flest Two Sample and Two-Sample Hypothesis Tests for Variance One Sample and Two Sample Hypothesis Tests for Variance One Way ANOVA, Two Way ANOVA ANALYSIS OF VARIANCE NONPARAMETRIC NONPARAMETRIC IESTS NONPARAMETRIC Sign Test Wilcoxon Test for One Sample And Vay Repeated Measure ANOVA Nood's Median Test Friedman ANOVA Mood's Median Test Friedman ANOVA Principal Component Analysis Canonical Discriminant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | | | |
|--|-----------|--|----------|-----------|
| 1D and 2D Frequency Counts | TATISTICS | | ORIGIN | ORIGINPRO |
| Correlation Coefficient Discrete Frequency Distribution Fit Normality Test (Shaprio-Wilk, Uilliefors, Kolmogorov-Smirnov, Anderson-Darling, D'Agostino-K Squared, Chen-Shapro) Statistics Charts: Histogram, Box Chart, Scatter Matrix, QC Chart, Probability Plot, Q-Q Plot, and Pareto Chart Grubbs Test and Q-test to Detect Outliers One Sample and Two-Sample Hest, Pair-Sample Hest, Pair-Sample Hest Test on Rows One Sample and Two Sample Hyothesis Tests for Variance One and Two-Proportion Test One Way ANOVA, Two Way ANOVA ANOVA: Mean Comparison (Tukey, Bonferroni, Scheffe, Dunn-Sidak, Fisher LSD, Holm-Bonferroni, Holm-Sidak) One Way and Two Way Repeated Measure ANOVA Sign Test Wilcoxon Test for One Sample and Paired Sample Two Sample AnovA Mood's Median Test Friedman ANOVA Principal Component Analysis Cluster Analysis Discrimininant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | Basic Descriptive Statistics | ✓ | ✓ |
| DISCRIPTIVE DISCRIPTIVE STATISTICS Discrete Frequency Distribution Fit Normality Test (Shaprio-Wilk, tilliefors, Kolmogorov-Smirnov, Anderson-Darling, D'Agostino-K S quared, Chen-Shapro) Statistics Charts: Histogram, Box Chart, Scotter Matrix, QC Chart, Probability Plot, QQ Plot, and Pareto Chart Grubbs Test and Q-test to Detect Outliers One Sample and Two-Sample Flest Two Sample and Two-Sample Flest, Pair-Sample Flest Two Sample and Paired-Sample Flest on Rows One Sample and Two Sample Hypothesis Tests for Variance One and Two-Proportion Test One Way ANOVA, Two Way ANOVA, Two Way ANOVA ANOVA: Mean Comparison (Tukey, Bonferroni, Scheffe, Dunn-Sidak, Fisher LSD, Holm-Bonferroni, Holm-Sidak) One Way and Two Way Repeated Measure ANOVA Sign Test Wilcoxon Test for One Sample and Paired Sample Two Sample NONPARAMETRIC TIESTS MULTIVARIATE NONPARAMETRIC TIESTS MULTIVARIATE ANALYSIS Cluster Analysis Cluster Analysis Canonical Discriminant Analysis Canonical Discriminant Analysis Canonical Discriminant Analysis Variable Analysis Canonical Discriminant Analysis Variable Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | . , | ✓ | ✓ |
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| Normality Test (Shaprio-Wilk, Lilliefors, Kolmogorow-Smirnov, Anderson-Darling, D'Agostino-K S quared, Chen-Shapro) Statistics Charts: Histogram, Box Chart, Scatter Matrix, QC Chart, Probability Plot, Q-Q Plot, and Pareto Chart Grubbs Test and Q-test to Detect Outliers One Sample and Two-Sample t-Test, Pair-Sample t-Test, Pair-Sample t-Test on Rows One Sample and Paired-Sample t-Test on Rows One Sample and Two Sample thypothesis Tests for Variance One and Two-Proportion Test One Way ANOVA, Two Way ANOVA ANOVA, Two Way ANOVA ANOVA, Two Way ANOVA ANOVA, Two Way ANOVA Way Repeated Measure ANOVA ANOWA: Mean Comparison Tukey, Bonferroni, Scheffe, Dunn-Sidak, Fisher LSD, Holm-Bonferroni, Holm-Sidak) One Way and Two Way Repeated Measure ANOVA Sign Test Wilcoxon Test for One Sample and Paired Sample Two Sample Kolmogorov-Smirnov Test Wilcoxon Test for One Sample and Paired Sample Two Sample Kolmogorov-Smirnov Test Mann-Whitney Test Kruskal-Wallis ANOVA Anova Mood's Median Test Friedman ANOVA Principal Component Analysis Cluster Analysis Cluster Analysis Discrimininant Analysis Canonical Discriminant Analysis Canonical Discriminant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Analysis Cox Proportional Haz | | Discrete Frequency | ✓ | ✓ |
| Illietors, Kolmogorov-Smirnov, Anderson-Darling, D'Agostino-K S quared, Chen-Shapro Statistics Charts: Histogram, Box Chart, Probability Plot, Q-Q Plot, and Pareto Chart Grubbs Test and Q-test to Detect Outliers One Sample and Two-Sample +Test, Pair-Sample +Test Two Sample and Two-Sample +Test on Rows One Sample and Two-Proportion Test One Sample and Two-Proportion Test One Way ANOVA Two Way ANOVA ANOVA ANOVA ANOVA ANOVA ANOVA Two Way ANOVA Two Way ANOVA Two Way ANOVA Two Way and Two Way and Two Way Repeated Measure ANOVA Sign Test Wilcoxon Test for One Sample and Paired Sample Two Sample Anova Anova Repeated Measure ANOVA Two Way Anova Ano | | Distribution Fit | | ✓ |
| Statistics Charts: Histogram, Box Chart, Scatter Motrix, QC Chart, Probability Plot, Q-Q Plot, and Pareto Chart Grubbs Test and Q-test to Detect Outliers One Sample and Two-Sample Hest, Poir-Sample Hoyothesis Tests for Variance One Sample and Two Sample Hypothesis Tests for Variance One and Two-Proportion Test One Way ANOVA, Two Way ANOVA, Two Way ANOVA ANOVA: Mean Comparison Tukey, Bonferroni, Scheffe, Dunn-Sidak, Fisher LSD, Holm-Bonferroni, Holm-Sidak) One Way and Two Way Repeated Measure ANOVA Sign Test Vilcoxon Test for One Sample Two Sample Two Sample Alongorov-Smirnov Test Kruskal-Wallis ANOVA Mood's Median Test Friedman ANOVA Principal Component Analysis Cluster Analysis Discrimininant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | Lilliefors, Kolmogoróv-Smirnov, Anderson-Darling, D'Agostino-K S | √ | ✓ |
| Box Chart, Scatter McTrix, QC Chart, Probability Plot, Q-Q Plot, and Pareto Chart Grubbs Test and Q-test to Detect Outliers One Sample and Two-Sample HYPOTHESIS TESTING One Sample and Paired-Sample Flest on Rows One Sample and Two Sample Hypothesis Tests for Variance One and Two-Proportion Test One Way ANOVA, Two Way ANOVA ANOVA: Mean Comparison (Tukey, Bonferroni , Scheffe, Dunn-Sidak, Fisher LSD, Holm-Bonferroni , Holm-Sidak) One Way and Two Way Repeated Measure ANOVA Sign Test Wilcoxon Test for One Sample and Paired Sample Two Sample Surple and Paired Sample Two Sample Two Sample Two Sample Two Sample Colored Measure Anova Principal Component Analysis Cluster Analysis Discrimininant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | | | |
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| HYPOTHESIS TESTING HYPOTHESIS TESTING Two Sample and Paired-Sample F-Test on Rows One Sample and Two Sample Hypothesis Tests for Variance One and Two-Proportion Test One Way ANOVA, Two Way ANOVA ANOVA: Mean Comparison (Tukey, Bonferroni , Scheffe, Dunn-Sidak, Fisher LSD, Holm-Bonferroni , Holm-Sidak) One Way and Two Way Repeated Measure ANOVA Sign Test Wilcoxon Test for One Sample and Paired Sample Two Sample Kolmogorov-Smirnov Test Kruskal-Wallis ANOVA Mood's Median Test Friedman ANOVA Principal Component Analysis Cluster Analysis Discrimininant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | to Detect Outliers | ✓ | ✓ |
| Test on Rows One Sample and Two Sample Hypothesis Tests for Variance One and Two-Proportion Test One Way ANOVA, Two Way ANOVA ANOVA: Mean Comparison (Tukey, Bonferroni, Scheffe, Dunn-Sidak, Fisher LSD, Holm-Bonferroni, Holm-Sidak) One Way and Two Way Repeated Measure ANOVA Sign Test Wilcoxon Test for One Sample and Paired Sample Two Sample wood Paired Sample Two Sample Sample Two Sample Kolmogorov-Smirnov Test Mann-Whitney Test Kruskal-Wallis ANOVA Mood's Median Test Friedman ANOVA Principal Component Analysis Cluster Analysis Discriminiant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | t-Test, Pair-Sample t-Test | ✓ | ✓ |
| One Sample and Iwo Sample Hypothesis Tests for Variance One and Two-Proportion Test One Way ANOVA, Two Way ANOVA ANOVA: Mean Comparison (Tukey, Bonferroni, Scheffe, Dunn-Sidak, Fisher LSD, Holm-Bonferroni, Holm-Sidak) One Way and Two Way Repeated Measure ANOVA Sign Test Wilcoxon Test for One Sample and Paired Sample Two Sample Kolmogorov-Smirnov Test Kruskal-Wallis ANOVA Mood's Median Test Friedman ANOVA Principal Component Analysis Cluster Analysis Discrimininant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | T-Test on Rows | | ✓ |
| ANALYSIS OF VARIANCE ANALYSIS One Way And Two Way Repeated Measure ANOVA Sign Test Wilcoxon Test for One Sample and Paired Sample Two Sample Kolmogorov-Smirnov Test Kruskal-Wallis ANOVA Mood's Median Test Friedman ANOVA Principal Component Analysis Cluster Analysis Cluster Analysis Discrimininant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | LSTINO | One Sample and Two Sample Hypothesis Tests for Variance | | ✓ |
| ANALYSIS OF VARIANCE ANALYSIS OF VARIANCE ANOVA: Mean Comparison (Tukey, Bonferroni , Scheffe, Dunn-Sidak, Fisher LSD, Holm-Bonferroni, Holm-Sidak) One Way and Two Way Repeated Measure ANOVA Sign Test Vilcoxon Test for One Sample and Paired Sample Two Sample Kolmogorov-Smirnov Test Kruskal-Wallis ANOVA Mood's Median Test Friedman ANOVA Principal Component Analysis Cluster Analysis Discrimininant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | <u> </u> | | ✓ |
| ANALYSIS OF VARIANCE ANALYSIS OF VARIANCE (Tukey, Bonterroni, Schefte, Dunn-Sidak, Fisher LSD, Holm-Bonferroni, Holm-Sidak) One Way and Two Way Repeated Measure ANOVA Sign Test Wilcoxon Test for One Sample and Paired Sample Two Sample Kolmogorov-Smirnov Test Mann-Whitney Test Kruskal-Wallis ANOVA Mood's Median Test Friedman ANOVA Principal Component Analysis Cluster Analysis Cluster Analysis Discrimininant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | anova ' | ✓ | ✓ |
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| NONPARAMETRIC TESTS NONPARAMETRIC TESTS NONPARAMETRIC TESTS NONPARAMETRIC TWO Sample Kolmogorov-Smirnov Test Mann-Whitney Test Kruskal-Wallis ANOVA Mood's Median Test Friedman ANOVA Principal Component Analysis Cluster Analysis Discriminiant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | One Way and Two Way Repeated Measure ANOVA | | ✓ |
| Sample and Paired Sample Two Sample Two Sample Kolmogorov-Smirnov Test Mann-VVhitney Test Wann-VVhitney Test Wood's Median Test Friedman ANOVA Principal Component Analysis Cluster Analysis Cluster Analysis Canonical Discriminant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model Wanney Test Manual Sample Two Sample Tw | | | | ✓ |
| NONPARAMETRIC TESTS Kolmogor'ov-Smirnov Test Mann-Whitney Test Kruskal-Wallis ANOVA Mood's Median Test Friedman ANOVA Principal Component Analysis Cluster Analysis Discrimininant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | Sample and Paired Sample | | ✓ |
| Kruskal-Wallis ANOVA Mood's Median Test Friedman ANOVA Principal Component Analysis Cluster Analysis Discriminiant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | Two Sample Kolmogorov-Smirnov Test | | ✓ |
| MOOD'S Median Test Friedman ANOVA Principal Component Analysis Cluster Analysis Discrimininant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | F212 | | | ✓ |
| Friedman ANOVA Principal Component Analysis Cluster Analysis Cluster Analysis Discrimininant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | Kruskal-Wallis ANOVA | | ✓ |
| Principal Component Analysis Cluster Analysis Discriminiant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | Mood's Median Test | | ✓ |
| Cluster Analysis Discriminiant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | Friedman ANOVA | | ✓ |
| MULTIVARIATE ANALYSIS Discrimininant Analysis Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | Principal Component Analysis | | ✓ |
| ANALYSIS Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | Cluster Analysis | | ✓ |
| Canonical Discriminant Analysis Partial Least Squares Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | Discrimininant Analysis | | ✓ |
| SURVIVAL ANALYSIS Kaplan-Meier Estimator Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | Canonical Discriminant Analysis | | ✓ |
| SURVIVAL ANALYSIS Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | Partial Least Squares | | ✓ |
| SURVIVAL ANALYSIS Functions (Log-Rank, Breslow and Tarone-Ware) Cox Proportional Hazard Model | | Kaplan-Meier Estimator | | ✓ |
| Cox Proportional Hazard Model | | Functions (Log-Rank, Breslow and Tarone-Ware) | | ✓ |
| \A / -! F:- | | | | ✓ |
| | | Weibull Fit | | ✓ |
| POWER AND SAMPLE SIZE One, Two and Paired-Sample t-Test, One Way ANOVA, One and Two-Proportion Test, One and Two -Variance Test | | t-Test, One Way ANOVA, One and Two-Proportion Test, One | | ✓ |
| ROC CURVE ROC Curve ✓ | OC CURVE | ROC Curve | | ✓ |

| PEAK ANALYSIS | | | ORIGINPRO |
|------------------------------------|--|----------|-----------|
| | Baseline Detection | ✓ | ✓ |
| PEAK ANALYSIS | Baseline Subtraction | ✓ | ✓ |
| | Peak Finding | ✓ | ✓ |
| | Peak Integration | ✓ | ✓ |
| | Peak Fitting | ✓ | ✓ |
| | Fit Baseline with Peaks | | ✓ |
| | Fit Individual Peaks with Different Fitting Functions | | ✓ |
| | Batch Peak Analysis | | ✓ |
| SIGNAL ANALYSIS | | ORIGIN | ORIGINPRO |
| | Smoothing using Savitzky- Golay Filter, Adjacent Averaging, FFT Filter, and Percentile Filter | ✓ | ✓ |
| SMOOTHING AND FILTERING | FFT Filters: Low Pass, Low Pass Parabolic, High Pass, Band Pass, Band Block, and Threshold | ✓ | ✓ |
| | IIR Filter Design | | ✓ |
| FAST FOURIER TRANSFORM (FFT) | FFT with Basic Options | ✓ | ✓ |
| | 2D FFT and 2D FFT Basic Filtering | | √ |
| | Short-Time Fourier Transform (STFT) | | √ |
| | Discrete Wavelet Transform (DWT) and Inverse Discrete Wavelet Transform (IDWT) | | ✓ |
| | Wavelet Smoothing | | ✓ |
| WAVELET ANALYSIS | Wavelet Denoising | | ✓ |
| | Continuous Wavelet Transform (CWT) | | √ |
| | Evaluation of Continuous Wavelet Function | | ✓ |
| | Convolution and Deconvolution | √ | √ |
| | Coherence | ✓ | |
| OTHERS | 1D Correlation | ✓ | ✓ |
| | 2D Correlation | | ✓ |
| | Hilbert Transform | | ✓ |
| | Signal Envelope | | ✓ |
| | Signal Decimation | | ✓ |
| | Rise and Fall Time Analysis | | ✓ |



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| DATA MANIPULA | TION | ORIGIN | ORIGINPRO |
|--------------------------------|--|----------|-----------|
| | Sort Worksheet or Columns | ✓ | ✓ |
| REORGANIZA- TION | Stack and Unstack Columns | ✓ | √ |
| | Pivot Table | ✓ | ✓ |
| | Split Worksheet | ✓ | ✓ |
| | Converting XYZ Data to a Matrix | ✓ | ✓ |
| TRANSFORMA- TION | Transpose Worksheet or Matrix | ✓ | √ |
| | Shrink or Expand a Matrix | ✓ | ✓ |
| | Worksheet Query | ✓ | ✓ |
| | Reduce Duplicate X Data | ✓ | √ |
| EXTRACTION AND REDUCTION | Reduce Data by Skipping Every N Points | √ | √ |
| | Reduce Data to Evenly Spaced X | ✓ | ✓ |
| | Reduce XY Data by Group | ✓ | ✓ |
| OTHERS | Find and Replace Numeric and Text Values | ✓ | ✓ |
| | Translate Curve Vertically or Horizontally | ✓ | ✓ |
| | Data Filter for Worksheets | ✓ | ✓ |
| GADGET | | ORIGIN | ORIGINPRO |
| | Surface Integration Gadget | | ✓ |
| | Global Vertical Cursor Gadget Across Graphs | ✓ | ✓ |
| | Intersect Gadget | ✓ | ✓ |
| | Quick Sigmoidal Fit Gadgete | ✓ | ✓ |
| | Cluster Gadget | | ✓ |
| Gadgets | Quick Peaks Gadget | ✓ | ✓ |
| | Differentiate and Interpolate Gadget | √ | √ |
| | Quick Fit Gadget | ✓ | ✓ |
| | Rise Time Gadget | | ✓ |
| | Integrate, FFT and Statistics Gadget | ✓ | ✓ |

| IMAGE HANDLIN | IG | ORIGIN | ORIGINPRO |
|-------------------------|---|----------|------------|
| | Brightness | ✓ | ✓ |
| Image Adjustments | Contrast | ✓ | ✓ |
| | Gamma | ✓ | ✓ |
| | Hue | ✓ | ✓ |
| / Acquaiments | Invert | ✓ | ✓ |
| | Saturation | ✓ | √ |
| | Histogram Contrast | ✓ | ✓ |
| | Histogram Equalization | ✓ | ✓ |
| | Auto Leveling | ✓ | √ |
| | Color Level | ✓ | √ |
| | Function Look Up Table | | √ |
| | Leveling | | √ |
| | Balance | √ | ✓ |
| | Color Replace | √ | ✓ |
| | Alpha Blend | | √ |
| | Extract to XYZ | | · / |
| | Image Simple Math | | |
| | Math Function | | <i>'</i> ✓ |
| Arithmetic | Morphological Filter | | → ✓ |
| Transforms | Pixel Logic | | |
| | Replace Background | | |
| | Subtract Background | | |
| | Subtract Interpolated | | · · |
| | Background | | ✓ |
| | Convert Image to Data | ✓ | ✓ |
| | Convert Color Image to Grayscale | ✓ | ✓ |
| | Convert Data to Image | ✓ | ✓ |
| lmage | Binary and Auto Binary | ✓ | ✓ |
| Conversion | Dynamic Binary | | ✓ |
| | Threshold | | ✓ |
| | RGB Merge / RGB Split | | ✓ |
| | Image Scale | ✓ | √ |
| | Auto Trim Image | √ | √ |
| Geometric Transforms | Crop Image | √ | √ |
| | Flip Image Horizontally or Vertically | ✓ | ✓ |
| | Offset Image | ✓ | √ |
| | Resize Image | √ | √ |
| | Image Rotation | √ | √ |
| | Shear Image | √ | ✓ |
| Spatial Filters | Average Filter, Gaussian Filter, and Median Filter | ✓ | √ |
| | Add Random Noise to Image | ✓ | ✓ |
| | Edge Detection | √ | √ |
| | Increase or Decrease Image Sharpness | √ | ✓ |
| | Apply Unsharp Mask | √ | |
| | User-Defined Spatial Filter | • | + - |

