

Accelerated Life Testing Analysis Software

Relyence® ALT software provides complete accelerated life testing analysis as part of the technically advanced Relyence tool suite. Based on the statistical analysis of accelerated test data obtained from your stress tests, compute reliability metrics to quantify how your product will perform over its lifetime.

KEY HIGHLIGHTS

- Full accelerated life testing analysis
- Multiple distribution types
- Best Fit Analyzer
- Support for 10 stress models
- Up to 5 stress types
- Choice of 7 plot types
- Built-in Analytics Calculator
- Data import & export
- Role-based permissions
- PC, Mac, tablet, smartphone
- Available on the Web or installed
- Zero-client, browser-based

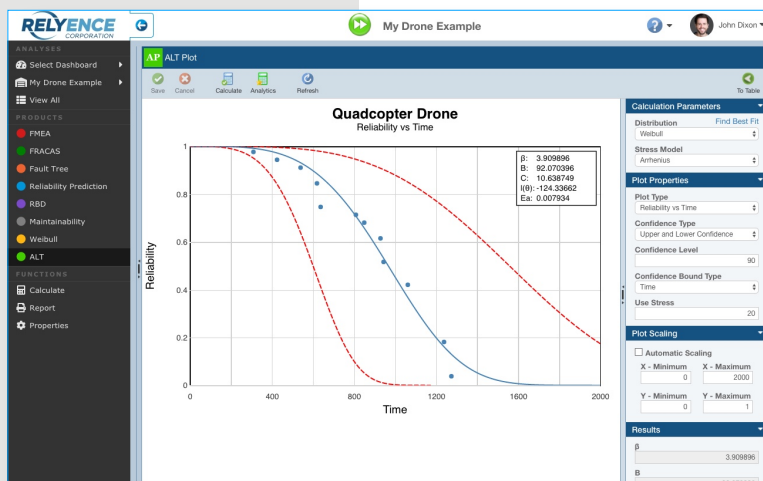
Accelerated Life Testing Analysis. Relyence ALT is built to maximize the analysis of your accelerated life testing data by enabling you to discover failure trends, predict future failure characteristics, and evaluate your product lifetime performance using statistical techniques based on mathematical distributions. Enter your accelerated life testing data in a variety of available formats, select the stress model, and Relyence ALT will generate your plot and compute the resulting distribution parameters.

Powerful Mathematical Engine. Relyence ALT's advanced computational engine provides both power and flexibility. Distributions supported include Exponential, Lognormal, Rayleigh, and the versatile and widely-used Weibull. Ten stress models are supported, including Arrhenius, Eyring, Log-Linear, and Inverse Power Law. Relyence ALT can perform analysis using up to 5 different stress types. The built-in Best Fit Analyzer can be engaged to determine the distribution which best suits your data. The results of the Best Fit Analyzer include residuals for all distribution types. You can also expand the results to view the parameters of each distribution analyzed.

Capabilities to Rely On. Relyence ALT includes a host of powerful capabilities. Data entry is easy and efficient - you can copy and paste from Excel, import from other sources using the built-in step-by-step process, or simply enter your data in directly. The built-in Analytics Calculator enables you to perform a variety of calculations based on your ALT data, including Acceleration Factor, Bearing Life (BX), Conditional Reliability, Failure Rate, Mean Life, Reliability, Probability of Failure, and Warranty Time. In addition, our device independent platform is browser-based and enables you to perform your analyses on your PC, Mac, tablet, or smartphone.

ALT Plots. Relyence ALT's highly intelligent mathematical engine quickly computes distribution result parameters and generates an interactive graphical plot that visually depicts key trends. You can select from a variety of plot types, including Acceleration Factor vs Stress, Failure Rate vs Time, PDF (Probability Density Function) plots, Probability, Reliability vs Time, Unreliability vs Time, and Standard Deviation vs Stress. You can choose to include confidence bounds on your plots, specify the confidence level to use for calculations, and select either Reliability or Time as the confidence bound.

Deployment Choice. Relyence ALT, as all Relyence software tools, is built on the Relyence Platform - a highly adaptable and mobile-friendly framework constructed with today's workplace in mind. Relyence ALT can be installed on-premise at your location, hosted in the Microsoft Cloud to take advantage of Microsoft's industry-leading Azure platform, or hosted in your own private secure cloud. All platforms offer the same features and functions. The choice is yours!



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Full ALT analysis in one powerful tool.

ALT Data Points

Built-in Analytics Calculator

Data Set and Calculation Parameters

Time	Temperature	Quantity	Failure
1	24.000000	45.000000	1.000000
2	48.000000	38.000000	1.000000
3	48.000000	45.000000	2.000000
4	72.000000	38.000000	3.000000
5	72.000000	45.000000	2.000000
6	96.000000	32.000000	1.000000
7	96.000000	38.000000	1.000000
8	96.000000	45.000000	5.000000
9	120.000000	38.000000	2.000000
10	144.000000	32.000000	1.000000
11	144.000000	38.000000	3.000000
12	168.000000	32.000000	3.000000
13	168.000000	32.000000	5.000000
+	0.000000		

ALT Data Set

Best Fit Distribution Results

Rank	Distribution	Residual
1	Weibull	-124.33662
2	Lognormal	-127.583
3	Rayleigh	-130.2353
4	Exponential	-143.6636

Extensive Help including Videos

Account Management

Plotted Data Points and Trend Curve

Plot Properties and Results

Upper and Lower Confidence Bounds

ALT Plot Results

Automatic or Manual Plot Scaling