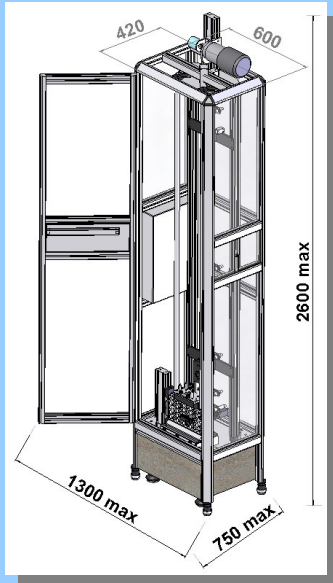


PWB Level Drop Tester



QUALITY ASSURANCE
TOOLS FOR
PROFESSIONAL USE

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Determines reliability of the PWC level against mechanical shock

- Suitable for Jedec testing method
- Provides shock pulses up to peak acceleration of 5000 g
- Supports continuous measurement and automatic repeatability
- Delivered and used with standard Windows PC, acceleration sensor, event detector and PC oscilloscope
- Designed for hard professional use
- Convenient and safe to use with protective cabinet
- CE compliant
- Small foot print requires minimum installation space



Salon **Teknopaja** oy

Advance and Automated Shock Testing

The PWB Level Drop Tester manufactured by Salon Teknopaja Ltd determines the component reliability in printed wiring boards and it is used for PWB level mechanical shock tests. The drop tester can produce various drop testing conditions. The analysed componentst are assembled to specific test board. In testing Teknopaja’s PWB Level Drop tester supports Jedec type of test boards but also customer specific test board design is supported. It also supports continuous measurement and automatic repeatability. The design of the tester and the assessories included in the package are for hard professional use. The drop tester is easy, convenient and safe to use with protective cabinet. The small foot print makes is flexible to install even in small testing space.

The PWB Level Drop Tester is delivered as a full working package with “turn key” principle: it is delivered with Windows PC, PC oscilloscope, acceleration sensor, event detector and needed consumables and tools. PC oscilloscope and acceleration sensor are mainly for the calibration purpose of the drop tester. Event detector is used during the live shock tests of printed wiring test boards indicating the breaks in the measured components.

The components are well integrated to each other. When shock testing, the Windows PC controls the drop tester integrated with the event detector. Alternatively, the touch screen operated control panel can be used. The panel is typically used during the calibration and during the preparations before eventual test cycles.



The Touch Screen Operated Control Panel

The event detector’s intelligent software is fully integrated with the drop tester and the tester control can be operated using the graphical user interface shown below.

The user interface is well designed. The main user interface window shows clearly the status of the measured printed wiring board during the test.

Break count is shown with numbers and changing colours5

Clicking channels break count window or channel number the user will get channel related statistics display

The drop count and height are defined by the user in the software

The Main User Interface (measurement card windows).

The breaks are presented in steady position and under shock.

¹ The screen displays are from Bluelec BE16C8 event detector, which is delivered as part of the package (pictures below).

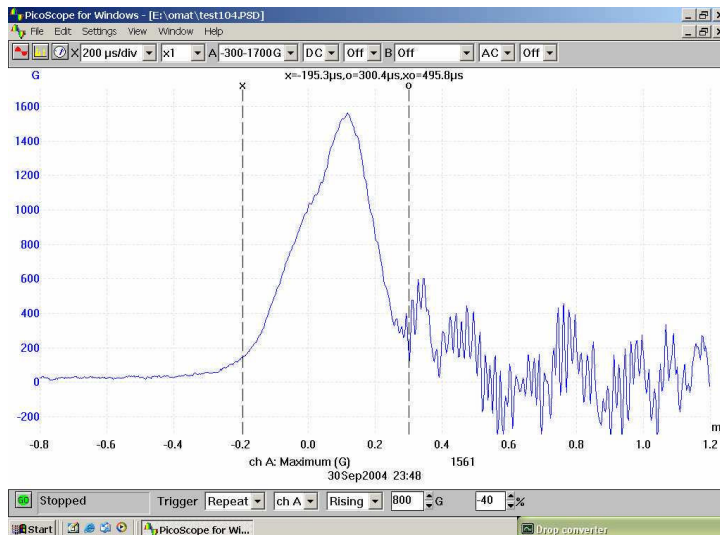


The results of the test are logged in a text file, where the values can easily be picked up for spread sheet programs for further analysis.

Calibration with PC Oscilloscope, Acceleration Sensor and Data Processing Software

Included in the full testing package, the Drop tester is delivered with the PC oscilloscope. The PC Oscilloscope combines high sampling rates with a high resolution. Together with the supplied software, the Windows PC can be used as a dual channel oscilloscope and spectrum analyzer.

PC oscilloscope is using acceleration sensor to measure the shock. During the calibration normally three parameters are being observed: peak acceleration, pulse duration and pulse shape. These can be easily monitored in the PC oscilloscope user interface and the results are also logged in a data file for further analysis. The specifications for measured parameters is dependant on the used testing method.



With specific data processing software, Drop Converter, the calibration results can be analysed and illustrated. This software automatically reprocesses the data files saved by the PC oscilloscope in the calibration tests. The results are presented in graphical plots and table format. The results are also saved in separate files to be further analysed with e.g. spreadsheet programs.

