



The CEAST DAS 64K and DAS 64K-SC are state-of-the-art Data Acquisition Systems designed for impact testing instruments. Compatible with the full range of CEAST impact testing systems, including pendulum type machines (CEAST 9000 Series) and drop towers (CEAST 9300 Series), they are the key for instrumented impact testing.

The DAS 64K is the result of a complete re-design that enhances its versatility and testing efficiency. This significant step forward is also accomplished by the simultaneous evolution of VisualIMPACT, the dedicated software for instrument handling and data processing.

These flexible and modular systems are now equipped with new and fully redesigned acquisition cards with the sampling frequency up to 4 MHz rate, which improves the acquisition detail.

Main Features and Benefits

- Up to 65,536 data points acquired and stored per test per channel
- Fully programmable (via software) parameters, including sampling rate, number of data points, gain, trigger mode and trigger level, with the possibility of selecting a master channel for triggering and data processing
- Designed to apply detailed calibration data as a function of the working conditions, with optimal repeatability and reproducibility
- A maximum sampling frequency of 4 MHz adds value and details in the curve acquired, especially where the impact event is extremely quick
- High-speed USB connection to PC and optimized data exchange and communication protocols with dedicated VisualIMPACT Software (v.6.00 or higher)

Unique Features

DAS 64K-SC

- LED status lights
- Single acquisition channel for strain-gauge tups/hammers, piezoelectric tups/vices, or Dynatup strain gauge tups
- Selectable acquisition rate up to 4 MHz, with 14-bit A/D converter and a bandwidth up to 700 kHz (depending on the rate)

DAS 64K

- Full LCD display
- Up to 4 independent channels for simultaneous data acquisition. Channels available: Strain gauge tup/hammer, piezoelectric tups/vices, Dynatup strain gauge tups, and general purposes with 0 to 10 V, -10 to +10 V, and 4 to 20 mA ranges
- Selectable acquisition rate up to 4 MHz (simultaneously on all channels), with 14-bit A/D converter and a bandwidth up to 700 kHz (depending on the rate)

Software VisualIMPACT Version 6

The new VisualIMPACT Version 6 is a powerful software suite designed for impact testing. Developed within the CeastVIEW software platform, it brings together CEAST and Instron® experience of impact testing, providing a complete interface between the instruments and the end user. Developed for data processing, organization, and reporting, it is configured into common application areas with a full set of new features for customization.

Standard Features

Version 6 maintains the outstanding features of the previous versions, and can be used to manage CEAST instruments and DAS systems for all types of tests, plus generic pendulum-type and drop tower machines for instrumented tests.

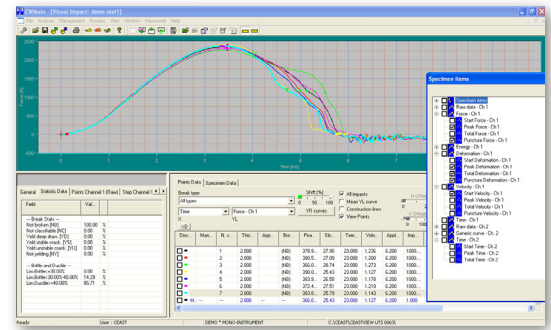
With easy installation and configuration, VisualIMPACT provides an advanced Windows® type interface for test set up, data retrieving, and elaboration. The test parameters set up is guided according to the selected international standard method, and allows the end user to specify testing environment information, test type, specimen type, configuration of the instrument, plus - for instrumented tests - DAS settings and main settings for data elaboration. When the automatic specimen feeding options is used, the operator is able to program a series of tests and organize data collection and storage.

The software creates a database with different filters that allows quick comparative analyses and post-processing data elaboration. Test results can be opened and studied in detail, exported with customizable formats, and used to generate printed reports.

New Features

VisualIMPACT Version 6 is developed together with the DAS 64K system, managing the new calibration parameters as a function of actual testing conditions and new powerful functions for in-field verification of tup calibration and DAS response. Key features are mainly dedicated to customization: instrumented tups and hammers, specimens, data types, and methods. The Report Wizard allows the user to configure, store, and select printing reports formats. It also allows easy management of signals coming from external sources (e.g. gauge sensors, lasers) in combination with the DAS 64K system.

A completely new section of the software deals with Profiles including: groups of settings regarding test results appearance (graphics and content of default data tables), defaults for data elaboration (definition of key data points, definition of lists for results classification), and defaults for data exporting and reporting (reference export format, reference printing report). A factory profile is provided for each standard method, and can be created for each operator, method, application, and end user of data. Stored profiles can be applied at any time and different sets of measure units can also be created, easily switching from one to another.



Test Results View and Table Customization

Element Name	Custom ...	C...	C...	Measurement Unit	Decimal Place
<input checked="" type="checkbox"/> Start Velocity				m/s	3
<input checked="" type="checkbox"/> Slow Down				%	2
<input checked="" type="checkbox"/> Peak Force				N	3
<input checked="" type="checkbox"/> Total Energy				J	3
<input checked="" type="checkbox"/> Total Displacement	Max Displ.			mm	3

Customized Printing Report Wizard

Profile set up
(detail of key data point customization)

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