

VIC-Gauge Real-Time Strain Measurement

Measurement System Feature Overview:

VIC-Gauge is offered as a turnkey strain measurement system for speckle correlation measurements. The system includes the following features:

- Real-time measurement of strain and displacement at one or many points
- Measure data at single points, or use virtual extensometers
- Analog value inputs for real-time load vs. strain reporting
- Optional dual analog outputs for non-contacting strain or displacement control up to 50Hz
- Full resolution images can be acquired and post-processed with Vic-2D to acquire full-field measurement of:
 - X & Y coordinates
 - X & Y displacements
 - In-plane velocities
 - Strain tensor, major and minor strains
- High strain resolution: up to 50 microstrain local, 5 microstrain point-to-point
- Strain measurement of 1,000% or higher possible
- In-plane resolution: $1/100,000 * \text{FOV}$ or better
- Full test setup can be saved as a project for fast, consistent repeated tests
- Data is available immediately in spreadsheet form including times, loads, displacements, and complete strain tensors for each point
- Software licenses: The system will come with image acquisition and analysis software preinstalled on a desktop or laptop computer. An additional license will be provided on a USB dongle. This dongle permits execution of the analysis software on any computer the user chooses.
- Data Export: Real-time data is automatically saved in a spreadsheet-compatible format (e.g., Microsoft Excel). Other formats can be supported on request as part of technical support.
- Software Interoperability: On Microsoft Windows systems, Correlated Solutions software is fully integrated with Cut & Paste functionality. All graphs and plots can be copied directly into any office suite software or saved in compatible image or video formats.
- The data density is freely selectable by the user by varying the spacing between analysis points.
- Turnkey systems include a desktop computer with the following minimum specifications:

- Intel i7 Quad-core Processor
- 16 GB RAM
- 2 TB hard drive, AND 250GB SSD
- 24” LCD
- DVD-R/W
- OpenGL® Graphics card with 3D acceleration
- Windows 7 Professional
- Microsoft Office 2010
- Turnkey systems for real-time testing include one high-resolution monochrome camera with resolutions available at 2, 5, 11, and 16 Megapixels
- The system includes one year of technical support via telephone/email and software upgrades. Technical support is available Mo-Fr 9am-5pm EST. On-site support and consulting is available.
- The system includes a one-year replacement warranty for defects in materials and/or workmanship on all parts.