



*The Fastest, Easiest, Most Accurate Way to Compare a Part to a CAD File™*

# VisionGauge® Digital Optical Comparator 300 Series / Field-of-View Systems

- Automatically compare parts to their CAD data with our proprietary CAD Auto-Align and CAD Auto Pass/Fail tools , in seconds
- Needs no overlays, templates or Mylars™
- Instantly computes and displays deviations-from-nominal and out-of-tolerance areas
- No operator-to-operator variation
- Extremely fast & easy-to-use!
- Full automated measurement capability
- The best, highest-resolution, clearest & sharpest image available!
- Joystick & barcode reader driven
- Intuitive software interface
- Innovative patent pending technology
- Accurate to +/- 0.0001" (2.5 μ)
- Automatic image & data collection
- Built-in SPC capability
- All-LED computer-controlled multi-illumination modules (back, front square-on and front oblique) are standard!
- High-resolution precision optics
- No moving parts
- No consumable parts
- Convenient desktop configuration
- Easy to learn and operate. You'll be up & running on "day one".
- Perfect for both the shop floor and the quality control lab



The 300 Series VisionGauge® Digital Optical Comparators are extremely cost effective Field-of-View Systems that are ideal for smaller parts (up to 1.7" x 1.2").

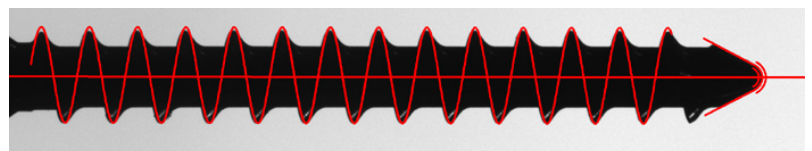
They have an extended depth-of-field for tall parts (as high as 1.1") and a long working distance that provides ample clearance and room to work between the part and the lens.

They produce a stunning super-high-resolution image to carry out fine, detailed inspections.

Three different types of LED illumination are standard: collimated back, front off-axis (i.e. "dark field") and front on-axis (i.e. "bright field"). This allows the system to produce crisp, sharp edges and perform beautifully even when working with hard-to-image materials (for example: shiny, reflective or even translucent surfaces) and difficult geometries (such as deep holes).

VisionGauge® Digital Optical Comparators are complete, ready-to-run Windows-based solutions. They are delivered network-ready and include on-site installation, NIST-traceable calibration & training.

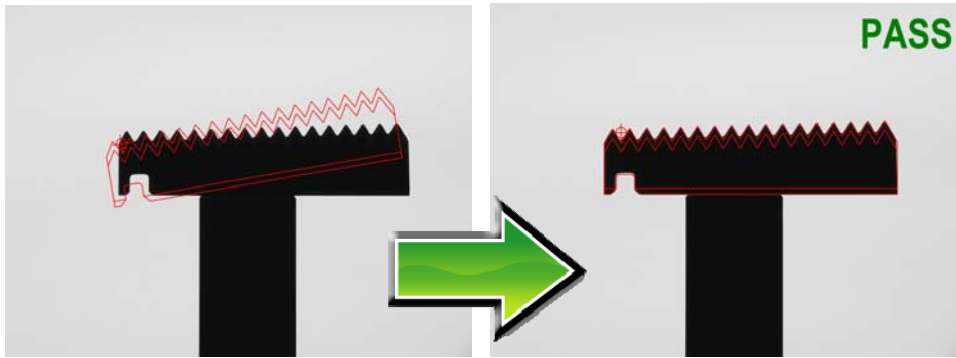
The 300 Series Field-of-View Systems are desktop instruments that have all of the functionality of the 500 Series VisionGauge® Digital Optical Comparators, with the sole exception that they are limited to smaller parts.



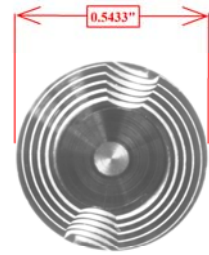
# VisionGauge® Digital Optical Comparator 300 Series - Principal Specifications

	Model #		
	VG300DOC-30V-40X	VG300DOC-30V-20X	VG300DOC-30V-10X
Maximum part size (i.e. field-of-view dimensions)	0.85" (h) x 0.60" (v) (i.e. 1.0" diagonal)	1.7" (h) x 1.2" (v) (i.e. 2.0" diagonal)	3.1" (h) x 2.3" (v) (i.e. 3.9" diagonal)
Maximum part height	0.2"	0.8"	3.0"
Vertical clearance (between the working surface and the lens)	4.1"	6.5"	8.9"
Equivalent optical magnification (approx.)	40X	20X	10X
"Desktop" configuration	Yes		
Image viewing area (diagonal)	38"		
Software	VisionGauge® OnLine Standard Edition		
Software interface	Intuitive, windows-based graphical user interface (i.e. "point & click")		
Part fixturing configuration (if desired)	Tapped hole pattern on main working surface surface (#10-24)		
Working surface finish	Hard coat anodized aluminum with glass insert		
Maximum load	50 lbs		
Camera	High-resolution, digital (9 MegaPixel)		
Live video "refresh"	Real-time		
Illumination	<ul style="list-style-type: none"> <li>• LED-based (for very stable illumination conditions, with a very long life)</li> <li>• Programmable and computer-controlled (for repeatable illumination conditions)</li> <li>• Includes 3 different illumination modules: collimated transmitted (i.e. back), on-axis reflected (i.e. front) and oblique reflected (i.e. front) illumination modules are standard</li> </ul>		
Lens	Very low distortion telecentric, with long working distance and extended depth-of-field		
Real-time mathematical image processing, enhancement and correction	Yes		
Multi-monitor display	Yes		
Overall Quad-Monitor size	35" (wide) x 27" (high)		
Auto Pass / Fail (to determine if the part matches the CAD data)	Yes		
Auto Pass / Fail Control Sections & Geometric ENTITIES	User-selectable, with bi-directional tolerances		
CAD Auto-Align	Yes: automatically align the CAD data to the part (either XY or XY & Rotation alignment) along an arbitrary number of user-specified datums.		
Extended set of high-accuracy measurement tools	Yes		
Sub-pixel accurate edge detection	Yes		
Quickly carry out on-screen measurements using either the mouse or joystick	Yes		
Joystick	3-axis, 3-speed industrial grade		
Image annotation tools	Yes		
Quickly and easily save images of parts, either with or without the CAD overlay, measurements as well as time & date information	Yes		
Built-in SPC capabilities, with automatic numerical charts & PASS / FAIL graphs	Yes		
Automatic data export to Excel™	Yes		
Automatic data export to other applications	Yes (through Windows™ DDE or other mechanisms)		
Built-in Dynamic Data Exchange (DDE) support	Yes		
Easy file data import & export	Yes		
Automatically load-in a CAD file using the system's barcode reader	Yes		
Barcode reader	Honeywell, industrial grade		
Align the DXF overlay (position & orientation) using either the external 3-speed joystick or the intuitive on-screen controls	Yes		
DXF Overlay Toolbox for quick CAD data and settings changeover & recall	Yes ("1-click")		
Quick changeover between DXF overlay and crosshair or bull's eye (for measurements)	Yes ("1-click")		
Supervisor-level / operator-level password protection	Yes		
Operating System	Windows™ 7		
Built-in "F1 Help"	Yes		
Power requirements	110V, 2 Amp		
Operating temperature	10 °C - 30 °C		
Clear and easy-to-use documentation (both printed and electronic "pdf" format)	Yes		
Support (by phone, fax & email)	Included for a full year		
Free software updates	Included for a full year		
Warranty	1 year (complete)		

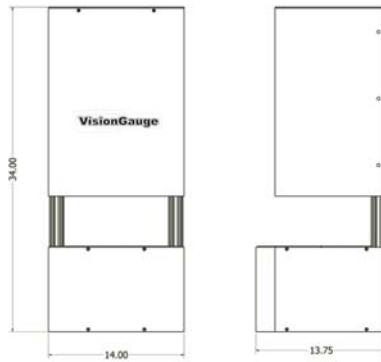
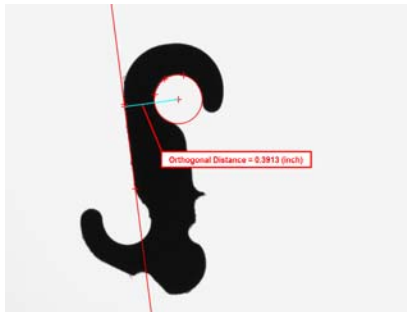
Note: specifications subject to change without notice.



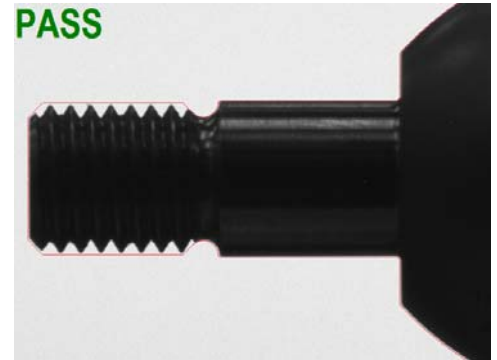
Proprietary CAD Auto-Align and Auto Pass/Fail tools work almost instantly and produce very accurate, operator-independent results



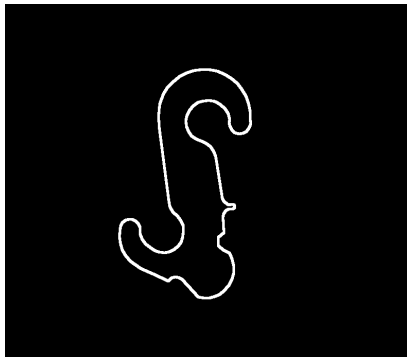
Fast and accurate automated measurements



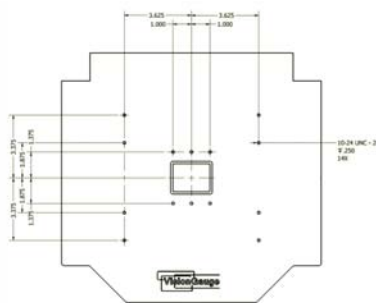
Main unit overall dimensions  
(Model # VG300DOC-30V-20X)



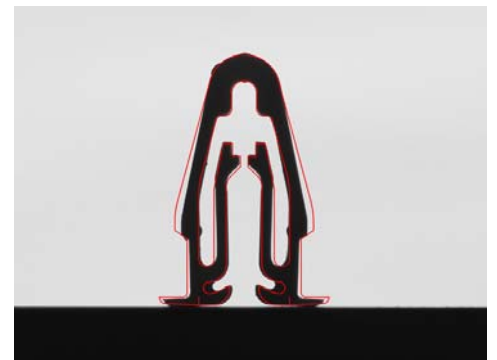
The groundbreaking CAD Auto Pass/Fail tool eliminates operator subjectivity



Reverse Engineer...



All-purpose mounting hole pattern for easy & flexible part fixturing (in the case where parts are to be fixtured)



Quickly and easily check flexible and other hard-to-inspect parts against their CAD data

## Distributed By:



## Developed By:

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