

## HS602 Sensor



### Overview

A small, compact sensor, the HS602 is ideal for applications where accessibility to the feature being measured is limited or where the speed of operator movement is of concern. It is best suited for use in measuring features with surface and subsurface designs such as gap and flush on panel fit-up and small stepped and angled features.



### Operating Features

**Design** - The HS602 sensor is the smallest of the hand-held sensors, about the size of a cigarette pack. It is used where access is limited such as in the interior of a vehicle. Based on the application, the cable strain relief can be configured either horizontally to the inspection surface or vertically out of the top of the sensor.

**Trigger** - Low-tactile trigger buttons are located on either side of the sensor. Either button can be used as the trigger, depending on the preference of the operator.

**Operator Feedback** - Three LED's at the front and the rear of the sensor direct the operator to correct roll angle for the sensor before the scan is completed. They also alert the operator to scanning errors and to the completion of a scan. A 2 x 16 LCD is used to display messages, alerting the operator of scanning errors, indicating when a good scan has been completed, showing the measurement value returned and providing instructions on where the next measurement is to be taken.

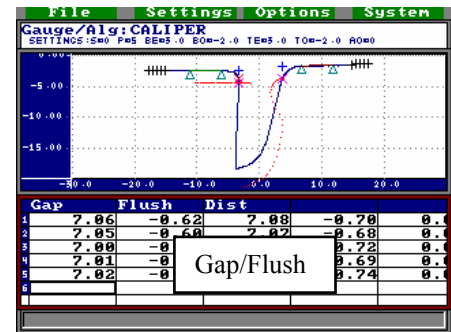
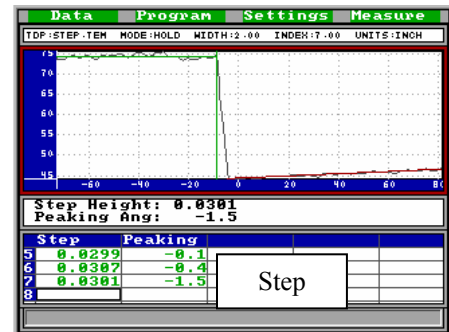


**Removable Standoffs** - Standoffs are used only to position the sensor above the surface at an optimum distance and to guide the sensor to the center of the feature being measured. They are not a factor in the calculations made. Standoffs are designed to the requirements of the application and can be changed by the operator when the sensor is used for different applications.

**Automatic Gain Adjustment** - The sensor's microcontroller automatically adjusts the intensity of the laser and the gain of the camera to optimize the sensor's performance on the various surface finishes, from raw metal to the full spectrum of painted colors.

## Applications

<b>Gap/Flush</b>	Automotive, aerospace and other assembly closure fits and part alignment.
<b>Step/Angle</b>	Steps 0 to 0.5", angles from -60° to +60°
<b>Weld Inspection</b>	Butt, lap and fillet welds, width from 0.050" to 0.50"
<b>Radius</b>	Radius of curvature measurements from 0.250" to 5.000"
<b>Wear</b>	Wear down to 0.002" depth
<b>Dents/Gouges</b>	Dents, gouges and foreign object damage from 0.002" to 0.500"



## Advantages

**Size** - The HS602 is so small and lightweight, it can be used for extended periods of time without the operator becoming fatigued. Because of its size, it can be used on features inaccessible to other sensors.

**Speed** - On moving assembly lines, the HS602 sensor can be quicker to use than the other models of hand-held sensors. The actual measurement taking is not any faster, but getting the sensor into position to take the measurement takes less time because the sensor is lighter and the operator can feel when it is in the correct position because of the way the sensor is held.

## Sensor Specifications

Type	Handheld
Size	1.6" (w) x 3.0" (h) x 2.5" (l)
Weight	10 oz
User Interface	2-row x 16-character LCD, 2 sets of 3 LED's
Cable Length	5' (1.5m) extended
FOV Options/Resolution	0.5" (13mm) / 0.0008" (20µm) 1.2" (30mm) / 0.001" (25µm)
Shock Protection	Coiled spring cable
Environment	0° - 70° C

 **Origin** Technologies Corporation

9238 Madison Boulevard, Building 1, Suite 845 • Madison, Alabama 35758 USA  
Phone 256.461.1313 • Fax 256.461.1390

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