LASER GAUGE

LASER-PRECISE
MEASUREMENTS

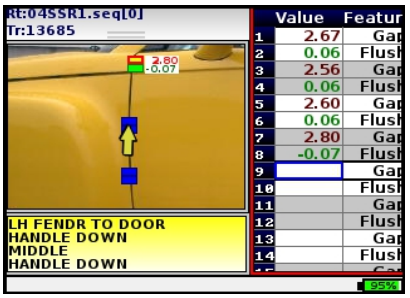
LG5000 Controller

Overview

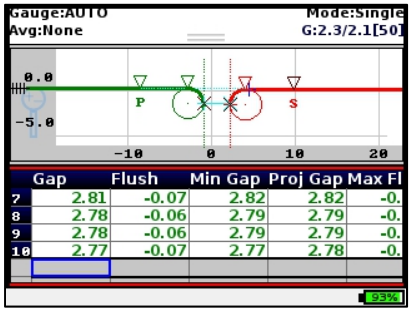
The compact, lightweight LG5000 controller can be used with all of the LaserGauge® controller-based sensors, including the HS305, HS306, HS410, HS602, and HS610 models, and it can also be used with the USB sensors including the HS722 model.

The controller is the smallest and lightest controller in the LaserGauge® product line, weighing only 19oz. The LG5000 has a 3.5" high resolution color display, and has both a touch screen and a joystick for alternative methods of interface. Data can be sent and received over a USB null modem cable or through wired and wireless Ethernet connection to a PC.

Operating Features



Routine Mode – Routine mode allows the user to run inspection routines developed using the LGWorks software. Multiple routines can be stored on the controller and automatically opened with the entry of an associated VIN, trace number or other identifier. Graphical and text instructions guide the operator to the proper measurement locations. Color-coded results and audible tones alert the operator to out-of-spec conditions.



Gauge Mode – The LG5000 controller supports all LaserGauge® measurement and analysis algorithms including virtual gauges, LGBasic algorithms, part setups and match-to-CAD. Scans are saved for each measurement taken and can be reviewed by simply selecting the data row. Algorithm settings can be modified and rerun against all scans in the data table to evaluate the impact of the change.

User Interface – A 320 x 240 graphical display with a touch screen provides a quick and easy way to navigate menus and select options. The keypad and joy stick also provide full selection functionality for environments not suited to touch screen use. Menus are organized in a flat tab format so that selections can be made quickly. Screen layouts can be configured according to the user's preference.

Communications – A peer-to-peer connection with a laptop and be established through a cross-over cable for direct communications. The most common method of sending and retrieving files is through a USB null modem cable. Files can also be copied to a removable USB drive and copied from the drive to the controller, or data and scan files can be copied from the controller to the USB drive.

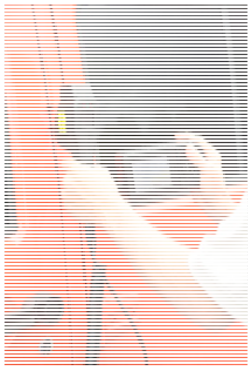
Automatic Data Saving – Whether in Routine mode or Gauge mode, data and scans can automatically be saved. If the battery is removed or the power runs out, the data will not be lost. Profiles documenting every measurement can be saved.

4 Way Rotational Screen – The controller display can be rotated 90 degrees, depending on your desired viewing orientation. The operator can set their individual preferences left hand or right hand operation, as well as vertical with screen up or down.

Battery Powered - A rechargeable, hot swappable, lithium-ion battery provides power for approximately four hours of continuous operation. An on-screen fuel gauge shows the charge remaining in the battery. An external charger can be used to recharge the battery or AC power can be connected to the controller and the battery recharged while the controller is in use. The AC adapter is rated for worldwide use.

Barcode Scanner - An integrated barcode scanner allows the operator to scan a barcode on the part or on the assembly being inspected, and then the barcode will be recorded in the data file for automatic traceability to the inspection results. The operator no longer has to manually enter trace information, such as a serial number or VIN. The barcode reader supports practically all universal formats.

Advantages



Portable – A complete system: controller, battery and sensor, weighs less than 2.5lbs and can be carried comfortably over the shoulder in a nylon bag.

Versatile – Different languages can be selected through the menus. Measurements and settings can be expressed in millimeters or inches, with a decimal or comma delimiter.

Advanced Features – High contrast scanning is available for use on dissimilar surface colors. 4 way screen rotation allows for use with any hand and hot-swappable battery permits uninterrupted use.

Controller Specifications

Operating Modes	Algorithm Only or Algorithm and Routine
Housing	Cast urethane case with reinforced mounts
Size	6.5" (w) x 2.375" (d) x 3.625" (h)
Weight	1.0lb. without battery
Processor	1GHz ARM
Memory	8Gbytes of data/scans/routines
Sample Rate	Up to 10 processed samples per second for many applications
Display	800(H) x 480(V) x 256 colors
User Interface	2 multi-function buttons, 5-way joy stick
Other Interface(s)	USB 2.0 ports (1x Type A, 2x Mini-B)
Power Requirements	12 VDC @<2.5 Amps
Power Supply	Worldwide 60W A/C adapter, (optional 12V rechargeable battery)
Environment	0° – 70° C
PC Software Interface	LGWorks, Windows™ XP and Windows 7 compatible.

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