

PRODUCT DATASHEET

LG7000 Controller

OVERVIEW

The LG7000 controller is used to run LaserGauge® USB model sensors, such as the TS800, instead running the sensor from a laptop or computer. The advantage of the LG7000 is that it supports the maximum functionality of the sensor and is rugged and portable, so measurements can be made anywhere.

Measurement data and scan images are saved to on-board memory, and can be analyzed on the controller or transferred to a computer using a USB cable or a wireless ZigBee connection.



OPERATING FEATURES

USER INTERFACE

A 7-inch graphical display with a touch screen provides a quick and easy way to navigate menus and select options. The keypad and joystick 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.

BATTERY POWER

A rechargeable, lithium-ion battery provides power for approximately three hours of continuous operation. An on-screen fuel gauge displays the charge remaining. An external charger is used to recharge and recalibrate the batteries.

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. Saved profiles document every measurement in the data table.

FILE TRANSFER

When the LG7000 controller is connected to a computer through a USB cable and identified as drive, files can be transferred using the Windows™ drag and drop functions. Files can also be transferred from a USB stick by plugging it into one of the controller's USB 2.0 type A ports. When the controller is connected wirelessly to a computer through the ZigBee module, files can be transferred using LaserGauge® applications.

OPTIONAL BARCODE SCANNER

An integrated barcode scanner is available as an option. It allows the operator to scan a barcode on the part or on the assembly being inspected, and the barcode will be recorded in the data file for automatic traceability. 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.

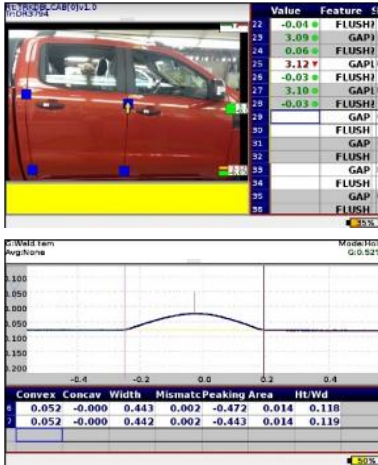
SENSOR SUPPORT

The LG7000 controller supports all handheld models of USB sensors, including sensors utilizing red and blue lasers. All advanced scanning functions used with blue laser sensors are available in the menus. In addition to USB sensors, the LG7000 also supports end-of-life, controller-based sensors such as the HS305, HS306, and HS410 models. The controller-based sensors must have a removable sensor cable or an integral sensor cable with a plastic 13-pin plug for connection to a controller.

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OPERATING MODES



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 opened automatically with the entry of an associated VIN, trace number or other identifier. An optional barcode reader can be used to scan the VIN. 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 LG7000 controller supports all LaserGauge® measurement and analysis algorithms including virtual gauges, LGBasic algorithms, and part setups. Scans are saved for each measurement taken and can be reviewed by simply scrolling up and down the data table. Settings can be modified and the algorithm rerun against all the current scans in the data table allowing the user to evaluate the impact of a change.

APPLICATIONS

AUTOMOTIVE

The LG7000 can be used with the TS800-F16 sensor to measure gap and flush on automotive exteriors, or used with the TS800-B-F08, blue laser option, to measure small, interior features or features on chrome and glass.

AEROSPACE

The LG7000 is particularly useful in aerospace applications when used with the TS800 sensor because the large display allows the user to analyze complex profiles as they are acquired.



CONTROLLER SPECIFICATIONS

| | |
|-----------------------|---|
| Operating Modes | Algorithm Only or Algorithm and Routine |
| Housing | Cast urethane case with reinforced mounts |
| Size | 8.4" (w) x 1.8" (d) x 6.3" (h) |
| Weight | 1.8lb. without battery |
| Processor and Memory | 1GHz ARM; 8Gbytes of data/scans/routines |
| Display | 800(H) x 480(V) x 256 colors, 7" display with touchscreen |
| User Interface | 2 multi-function buttons, 5-way joy stick |
| Ports | USB 2.0 ports (2x Type A, 1x Mini-B) and 13pin circular DIN |
| Power Requirements | 7.2VDC @ <2.5 Amps |
| Power Supply | Lithium-ion (non-metal) rechargeable battery, 7.2VDC |
| Environment | 0° – 70° C |
| PC Software Interface | LGWorks, Windows™ 10 compatible |