



LASER-PRECISE MEASUREMENTS

Overview

The compact, lightweight LG1200 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 HS720 model.

The controller has a high resolution display, and has both a touch screen and a keypad with 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.



Algorithm Mode – The LG1200 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 – An 800 x 480 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. Four keys on the front panel can be programmed by the user as shortcuts to the most often used functions. Screen layouts can be configured according to the user’s preference.

Communications – WLAN connectivity can be enabled and all available networks displayed for selection. The Ethernet connection can be made wirelessly or wired. 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.

Battery Powered – A rechargeable 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.

Automatic Data Saving – Whether in Routine mode or Algorithm 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.

Advantages

Portable – A complete system: controller, battery and sensor, weighs just over four pounds 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. The optional bar-code reader on the HS306 sensor can be used to input trace numbers and to automatically load routines.

Controller Specifications

Operating Modes	Algorithm Only or Algorithm and Routine
Housing	Cast urethane case with reinforced mounts
Size	7.2" (w) x 7.8" (d) x 4.0" (h)
Weight	3.0 lbs. without battery
Processor	500 MHz Pentium compatible
Memory	128 Mbytes 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	15 multi-function buttons, 5-way joy stick
Other Interface(s)	2 USB 2.0 ports, Ethernet port, video out
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.

