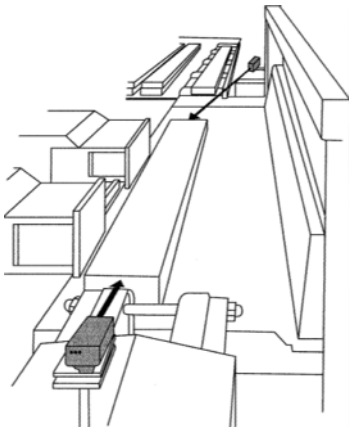
MODULOC® Control Systems

LD-6001 LASER LENGTH & WIDTH GAUGE



- ***Advanced Laser Technology providing precise distance measurement.***
- ***Measure off of hot or cold material.***
- ***Laser's can measure at an oblique angle.***
- ***Laser's can mount up to 100 feet from material.***
- ***Self-diagnostic code messages.***
- ***Remote Modem calibration.***

Features

- High resolution of between 3 to 10 mm
- Standard Interface: RS232/RS422
- Intelligent LDM incorporating continuous self test
- Optional Network Interface: PROFIBUS DP
- Secondary Environmental Enclosures are available for additional protection of laser for indoor, outdoor and elevated temperature applications.

Product Family	Measurement Ranges
• **ELDP10NRS**	Off natural surfaces up to 3.7M At temperatures up to 700°C
• **ELDP100NRS**	Off natural surfaces up to 40M At temperatures up to 700°C
• **ELDP20HT12**	Off a red hot surface up to 20M At temperatures up to 1200°C

Description

The LD-6001 System utilizes advanced technology ELDP Laser Distance Meters operating on a unique pulsed time-of-flight (TOF) measurement technique in conjunction with a powerful CPU engineered to provide convenient operation & communication between the lasers and the mill computer.

Utilizing compact line of sight ELDP Laser Distance Meters that operate off of both cold or hot product, even inside the furnace, this Gauging System is well suited for determining the size and position of steel product such as slabs, blooms or billet in the furnace area & other difficult areas in the rolling mill.

The CPU automatically energizes the Laser Distance Meters, interrogates their functional state, then displays the individual measured distances, calculates the width, length or centerline deviations. These values are then combined into a single data string for direct connection to a Mill Computer via RS232C serial port or an optional Network Interface.

Communication & adjustment of the laser distance meters functions is via a straightforward ASCII commands. A detachable keyboard, the Mill computer or the integrated modem provide 3 alternative means of calibration & fault finding on or off site. Calibration is straightforward and achieved by positioning an established source in the area of measurement and configuring the system via the mill computer or modem.

ELDP Laser Distance Meters

Secondary Environmental Enclosures

MODULOC® Technology - The Total Laser Solution

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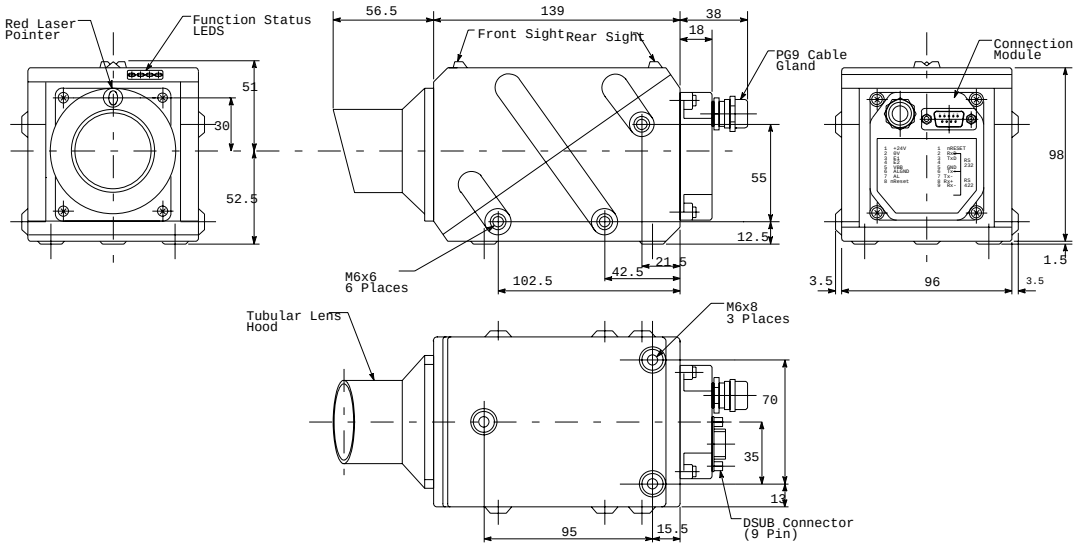
DIMENSIONS

ELDP Laser



Technical Info

	Reference Data	*ELDP10NRS*	*ELDP100NRS*	*ELDP20HT12*
Working Range off Product Surface	Material Color: Black	3.7M	40M	20M
Relative Accuracy (Min. update rate)	Repeatability	+/-3mm	+/-6 mm	+/-10mm
Maximum Product Temperature		700°C	700°C	1200°C
Measuring Laser	EN 60825-1	Class 1	Class 1M	Class 1M

Diagnostics	Self Diagnostic Error Message	Power supply	80 - 260 VAC Switch mode power supply
Update Rate	250 msec - 1000 msec	Temperature Range	-10°C - +50°C
Modem	Enables calibration of system and interrogation off site. (Model LD-6001-PC)	Enclosure Dimensions (mm)	Aluminum Housing, IP65, wall mounted, 330H x 230W x 110 D
Baud Rate	2400—9600 baud		
Standard Interface	RS232 (Model LD-6001-PC)	Optional Interface	PROFIBUS DP (Model LD-6001-PB)

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We reserve the right to alter specifications without prior notice. Specifications without tolerances are typical values.

Your Local Sales Representative:

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