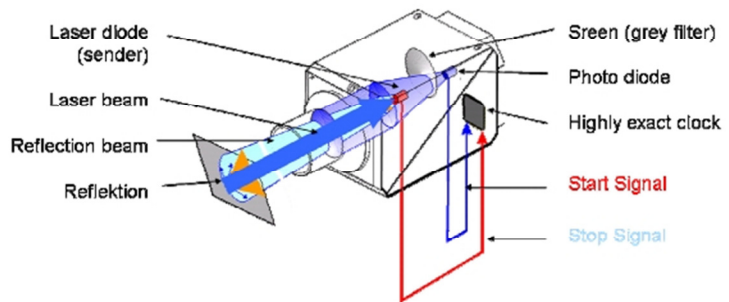


MODULOC Control Systems

MD-HDP 5100 Series Laser Distance Meters



Laser-Distance measuring by
"Time of flight" technology

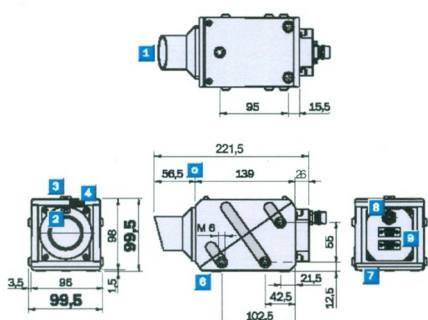
General characteristics	Extended characteristics
<ul style="list-style-type: none"> • Ranges of up to 1200 m according to model • High accuracy, resolution and fast measuring rate • Laser Pointer for the adjustment • Integrated microcontroller with intelligent parameters • Digital, analogue interfaces and 2 switching contacts • Optional Profibus DP interface • Rugged construction, IP65 • Self-test 	<ul style="list-style-type: none"> • Close-up range blanking for dirt/dust build up supression on front glass • Internal device temperature to read out via interface • Continuous visible alignment light for easy adjustment • Extended operating ambient range of -10°C to +55°C • Configuration software now included • CDRH- / UL-certification
<p>TYPICAL USAGES:</p>	<ul style="list-style-type: none"> • Measurement of length, width, height and level • Measurement and regulation of sag • Positioning of vehicles; Intelligent light barrier • Positioning of cranes & collision avoidance • Positioning of hot objects in Furnaces • Bulk profile measurement • Level Measurement in silos

Short description:

The HD-P/ELD-P Series measure via the "time of flight" technique at distances of up to 1200m where reflectors used and up to 155 m off natural surfaces.

They transmit extremely short multiple light pulses, then measure the running time of these pulses to the object and back, computing from this the distance. The measuring data is sent over a RS232/RS422 interface as well as a programmable analogue 4 - 20 mA output. Two switching outputs are available that can be configured in logic and band width. PROFIBUS DP is available as an interface.

The HP-P/ELD-P Series are intelligent devices equipped with a microprocessor, for evaluating and programming of the output and various supervisory alarms. High accuracies can be computed by configurable averaging that accommodates high-dynamic movements. Specific distances can be defined as threshold values. With their large measuring range these devices are used in the many different industries and for a large variety of tasks.



1	Dust Shield
2	Laser Pointer Pilot light
3	Alignment sight
4	Status indicators
5	Device zero point
6	Mounting holes, M6 x 6 deep
7	Plug cover
8	PG9
9	Sub D 9-pole plug Connector

Technical Data MDHP5100 Series

Model	MDHP51010	MDHP51100	MDHP51020HT	MDPH51600
Interfaces				
RS232 / RS422/ 4-20mA 0.3%	X	X	X	X
Profibus DP	X	X	X	X
Switch Outputs	E1, E2	E1, E2	E1, E2	E1, E2
Ranges:				
White 90%	0.1... 20m	0.5...155m ¹⁾		
Grey 18%	0.1... 7.5m	0.5 ... 70m ¹⁾		
Black 6%	0.1... 3.7m	0.5 ... 40m ¹⁾		
Red hot surfaces 1300°C			0.5 ... 20m ¹⁾	
Reflection Foil (LASE)	0.5 ... 80m	2... 800m		0.5 ... 600m ¹⁾
H R Plastic Reflectors				0.5 ... 800m ¹⁾
Triple Prism				0.5 ... 1200m ¹⁾
Accuracy *	+/- 1.5mm	+/- 3mm	+/- 5mm	+/- 2mm
Temperature Drift *	0.3mm /K	0.3mm /K	0.3mm/K	0.3mm /K
Measuring Accuracy	1 KHz	1 KHz	1 KHz	5 KHz
Laser Class				
Laser Protection Class DIN EN60825-1-2001	1	1 ²⁾	1 ²⁾	1 ²⁾
Lightspot 10 : 100m	7 cm :-	7.52 cm	7 cm :-	7.52 cm
Divergence	5 mRad	5 mRad	5 mRad	5 mRad
Output Distance	ASCII Textor Binary code	ASCII Textor Binary code	ASCII Textor Binary code	ASCII Textor Binary code
Display 4 LEDs	Function Indicator	Function Indicator	Function Indicator	Function Indicator
Electrical Supply:				
Voltage	18 ... 30 VDC	18 ... 30 VDC	18 ... 30 VDC	18 ... 30 VDC
Current	0.25 A (24V)	0.25 A (24V)	0.25 A (24V)	0.25 A (24V)
Environmental Protection Class	IP65	IP65	IP65	IP65
Shock and Vibration	IEC68	IEC68	IEC68	IEC68
Temperature Range: Operation	-10°C + 50°C ³⁾	-10°C + 55°C	-10°C + 55°C	-10°C + 55°C
Storage	-25°C + 70°C	-25°C + 70°C	-25°C + 70°C	-25°C + 70°C
Weight	1.3kg	1.3kg	1.3kg	1.3kg

Reproducibility for devices under constant environmental conditions (approx 20°C, 1013 mbar, same target)
After at least 30 min power-on time

- 1) When close-up range blanking is activated the minimum distance increases to 2m
- 2) When simultaneously using measuring laser and laserpointer (making laser) the class changes to 2!
- 3) In conjunction with Platform Enclosure with dual axis adjustment

Moduloc Technology – Digital Measurement for Precise Control

A Rotalec Group company

Group Head Office
Quebec, Canada
E: Info@rotalec.com
T: 514-341-3685

Manufacturing & International Sales
Hertfordshire, England
E: sales@moduloc-intl.com
T: +44 (0) 845-873-6501

USA Office
Minneapolis MN55344
E: sales@moduloc-usa.com
usa.com
Tel: 952-238-8453