INFORMATION LASER FOR THE FUTURE

LASE 1000D!H?

Laser-Distance measuring by "Time of flight" technology



General characteristics:

•Contactless distance measuring

- •Ranges of up to %/0 m
- •High accuracy, high resolution and high measuring rate
- Laser Pointer for the adjustment
- Inerfaces: RS-232 / RS-422 / SSI
 - Analog: 4..20 mA Profibus DP
 - 2x digital
- •Measuring frequency: 20 kHz
- Active dynamic control
- Modern lightweight design
- Simple configuration about 4 keys and display, alternativ over configuration software
- •Complete S7 function block inclusive
- •Close-up range blanking for dirt/dust supression on front glasses
- Internal device temperature to read out via interface
- Continuous visible alignment light for easy adjustment
- Easy connection over 4 electrical plugs
- Measuring beam: Laser class 1





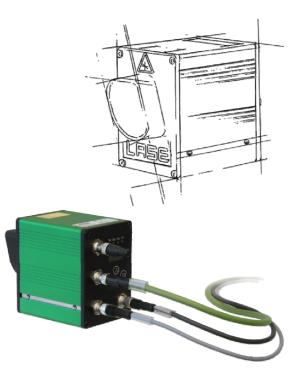
Short description:

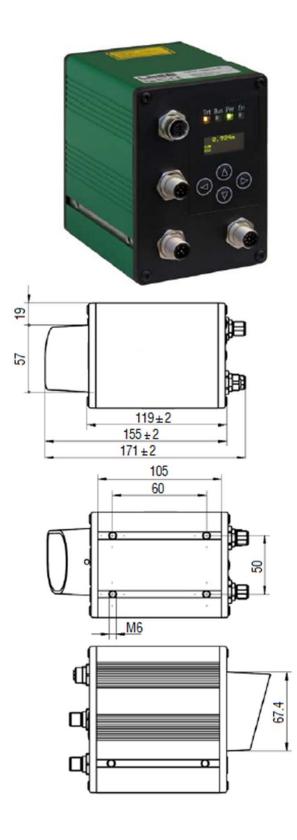
The LASE 1000D sensor can measure with his TOF technology (Time of flight technology) at distances of up to 800m where reflectors used and up to110m on natural targets.

The sensor transmits extremely short multiple light pulses, measures the running time of these pulses to the object and back and computes the distance. The measuring data will send serially over a RS-232 / RS-422 and SSI interface, as well as a programmable analog 4 - 20 mA output. Further more, a PROFIBUS DP interface is available. Also two switching outputs are on board which can be configured in logic and band width.

The LASE 1000D is equipped with a microprocessor, with which the application ranging is evaluated. High accuracies can be measured by controllable averaging that accommodates high-dynamic movements. Specific distances can be defined as threshold values. With the large measuring range the sensor can be used in many different industries and for a large variety of tasks:

- · Positioning of vehicles; intelligent light barrier
- · Positioning of cranes; collision avoidance





Technical Data LASE 1000D-TK

Signification :	LASE 1000D-TK
Interfaces :	
RS 232 / RS 422	Х
SSI	Х
Analog 4 20 mA	Х
Profibus DP	Х
Digital Outputs 2xPNP	E1, E2
Ranges :	
White 90% Targets	0.5 110 m
Grey 18% Targets	0.5 60 m
Black 6% Targets	0.5 35 m
Reproducibility: grey 18% targets	< 35m / ± 3 mm
Measuring frequency :	20 kHz
Resolution :	0.1 mm, adjustable
Laser class :	
Measuring Laser :	1 (905 nm)
Laser pointer :	2 (660 nm)
Diver gence :	
Measuring Laser :	6 mrad
Laser pointer :	1 mrad
Light spot :	Φ 15 cm by distance
g., oper .	s=20m
Output distance :	ASCII-Text
Display / Controls :	
Function indicator 4 LEDs	х
Control pad(4keys) for parameterization	х
Backlit Display for value display and	Х
parameter settings	
Elektrical supply :	
Voltage :	18 up to 30 VDC
Current :	0.25 A (24V)
Environmental protection class	IP 65
Temperature range :	
Operation :	-10°C +50°C
Storage :	-30℃ up to +70℃
Weight :	1.5 Kg

Scope of delivery LASE 1000D :

Sensor, Operating instruction, Configuration software, gsd-file, S7-function block







