

# Datasheet

- Reliable measurements on dark surfaces – even under solar radiation during outdoor operations
- Accuracy  $\pm 1$  mm or  $\pm 0.5$  mm
- Measuring range 0.05...~100 m, ~0.5...500 m respectively
- Max. measuring rate 50 Hz
- Analog output 0/4...20 mA
- Serial interface (RS-232, -422, -385, SSI)
- Digital inputs and outputs (standard)
- Further functions can be configured by the customers
- Optional interfaces on request:  
 PROFIBUS (external),  
 PROFINET, EtherNet/IP, EtherCAT



## Mechanical Data

Type	DEN-10-500	
Dimensions (L x W x H)	140 x 78 x 48 mm	
Laser	visible, red (Laser Class 2, <1mW)	
Laser dot		
at 10 m	7 x 3 mm	
at 50 m	28 x 13 mm	
at 100 m	55 x 30 mm	
Material		
Housing	aluminium	
Weight	350 g	
Measuring range		
on natural surfaces	0.05...~100 m	
on reflecting foil	~0.5...500 m	
Accuracy	$\pm 1$ mm [at $\pm 2 \sigma$ ]	$\pm 0.5$ mm [at $\pm 1 \sigma$ ]
Repeatability	$\pm 0.3$ mm [at $\pm 2 \sigma$ ]	$\pm 0.15$ mm [at $\pm 1 \sigma$ ]
Operating temperature	-10°C ... +50°C	
IP rating	IP65	

## Electrical Data

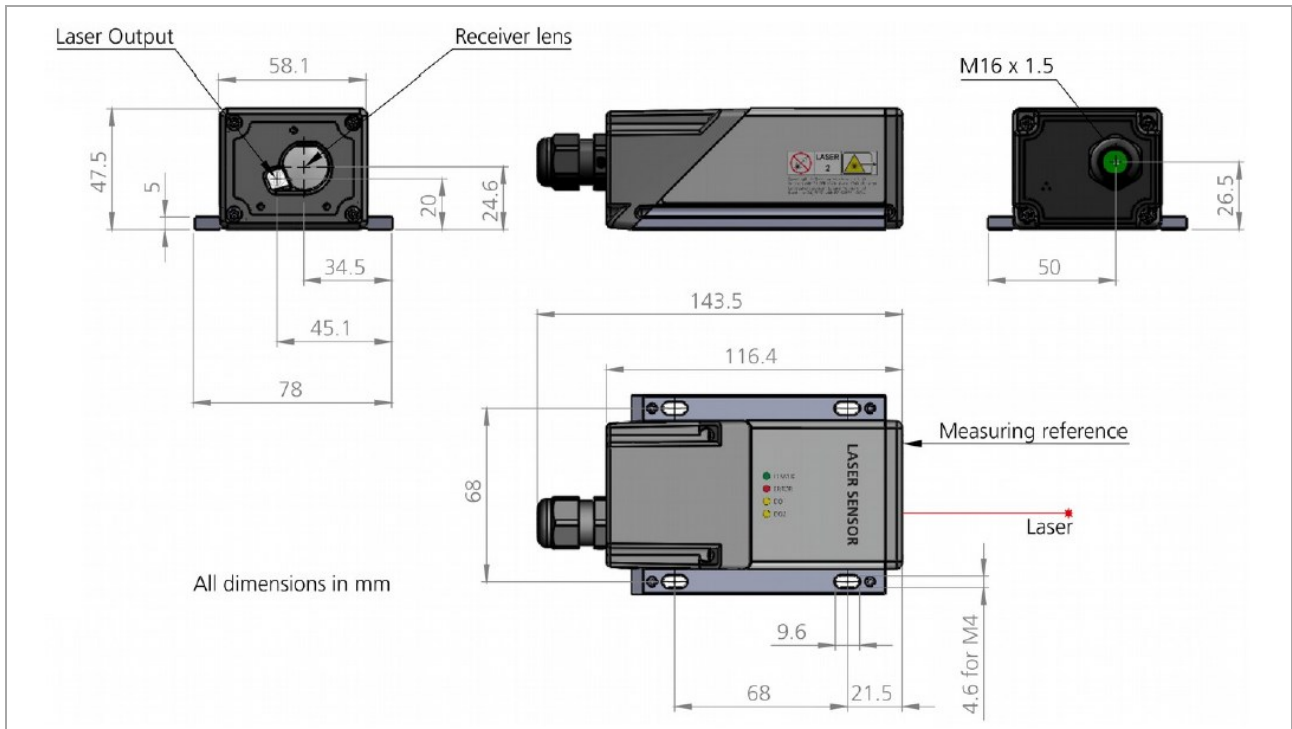
Type	DEN-10-500	
Power supply	12 ... 30 VDC	
Power consumption	0.15 A [at 24 VDC]	
Max. measuring rate	100 Hz	
Max. output rate	100 Hz	
Analog output, programmable	0/4...20 mA	
Max. error analog output	$\pm 0,1$ %	
Connection	internal screw terminals	
Interfaces		
Standard	Analog output, programmable, 0/4...20 mA 1 digital input, programmable Serial interface: RS-232, RS-422 / RS-485, SSI 2 digital output, 1 error display (NPN, PNP, Push-Pull) 1 USB, only for configuration	
Optional	PROFIBUS (external), PROFINET, EtherNet/IP, EtherCAT	

# Datasheet

## Functions

- Automatic mode for stand-alone operation
- Direct connection to an external display
- User distance offset / gain, programmable
- Filter functions, programmable
- Adjustable measuring behaviour
- Programmable device ID
- Trigger functionality

## Dimensions



## Ordering example

<b>Type</b>	<b>DEN - 10 - 500 - PROFINET</b>
<b>Accuracy</b>	<b>10</b> = ±1 mm [at ±2 σ]; ±0.5 mm [at ±1 σ]
<b>Measuring range</b>	<b>500</b> = ~0.5...500 m on reflecting foil; 0.05...~100 m on natural surfaces
<b>Interface (optional)</b>	PROFIBUS (external) <b>PROFINET</b> EtherNet/IP EtherCAT

**DIMETIX**  
 Manufacturer: LASER DISTANCE SENSORS

Without prior notice, the products may be subject to modifications that the Manufacturer reserves to introduce as deemed necessary for their improvement.