

Datasheet

- Reliable measurements on dark surfaces – even under solar radiation during outdoor operations
- Accuracy ± 5 mm or ± 2.5 mm
- Measuring range 0.05...~50 m
- Max. measuring rate 10 Hz
- Analog output 0/4...20 mA
- Serial interface RS-232
- Digital inputs and outputs (standard)
- USB interface and further functions can be configured by the customer



Mechanical Data

Type	DBN-50-050	
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	
Material		
Housing	aluminium	
Weight	350 g	
Measuring range		
on natural surfaces	0.05...~50 m	
on reflecting foil	n/a	
Accuracy	± 5 mm [at $\pm 2 \sigma$]	± 2.5 mm [at $\pm 1 \sigma$]
Repeatability	± 1.8 mm [at $\pm 2 \sigma$]	± 0.9 mm [at $\pm 1 \sigma$]
Operating temperature	-10°C ... +50°C	
IP rating	IP65	

Electrical Data

Type	DBN-50-050	
Power supply	12 ... 30 VDC	
Power consumption	0.15 A [at 24 VDC]	
Max. measuring rate	10 Hz	
Max. output rate	10 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 2 digital output, 1 error display (NPN, PNP, Push-Pull) 1 USB, only for configuration	

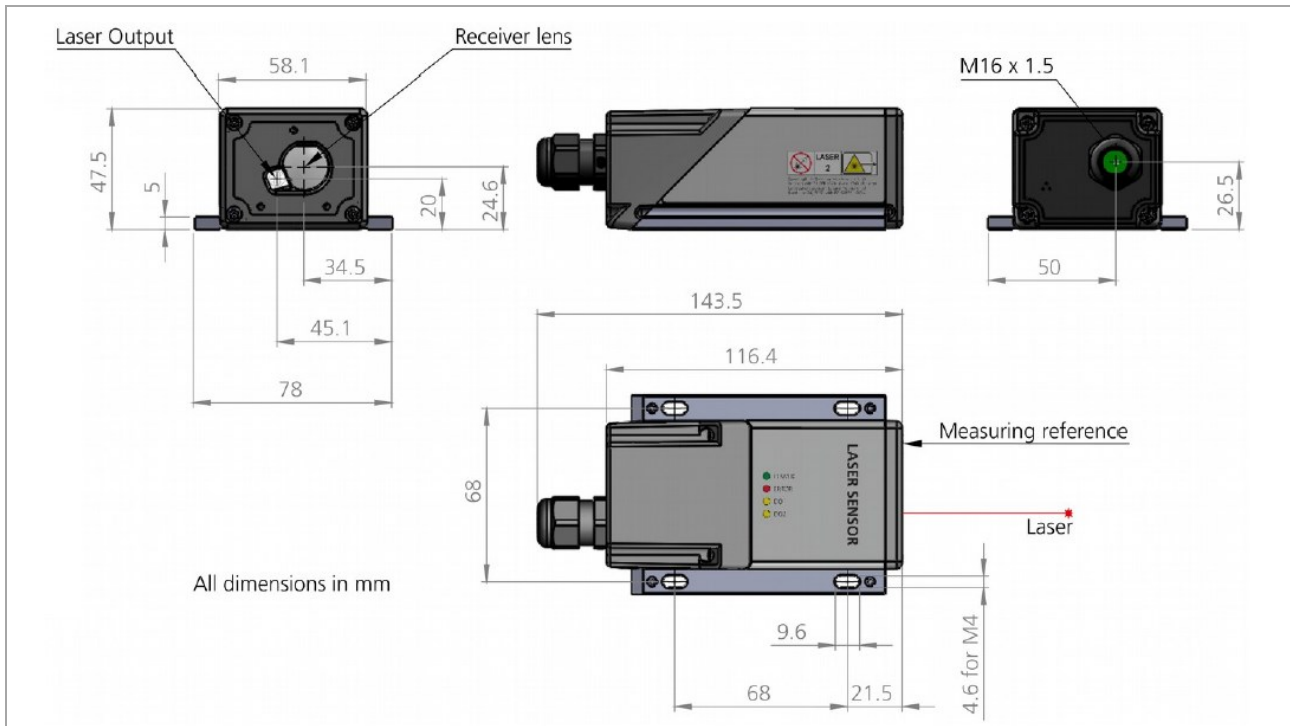
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Functions

- 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

Type DBN - 50 - 050

Accuracy
50 = ±5 mm [at ±2 σ]; ±2.5 mm [at ±1 σ]

Measuring range
050 = n/a on reflecting foil;
 0,05...~50 m on natural surfaces

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.