

USB 150

Optical Displacement Sensor using advanced laser technique, a line scan camera and digital signal processing algorithms.



Specifications

Measurement data

Measuring range	50 --- 250 mm
Centre distance	150 mm
Resolution	0.01 --- 0.03 mm
Linearity	± 0.05 mm
Reproducibility	\pm Resolution
Updating frequency	1000 Hz
Temperature deviation app.	$\pm 0.03\%$ of FS/ $^{\circ}$ C
Light source	visible laser (655 nm)
Size of light spot	app. \varnothing 2 mm
Laser protection class	IEC 2

Output data

Digital output as Binary or ASCII USB 2.0
ASCII protocol see backside of Data sheet.

Environment data

Operating temperature	0 - +50 $^{\circ}$ C
Storage temperature	-20 - +70 $^{\circ}$ C
Humidity (non condensing)	Max 90 % RH
Degree of protection	IEC IP65

Physical data

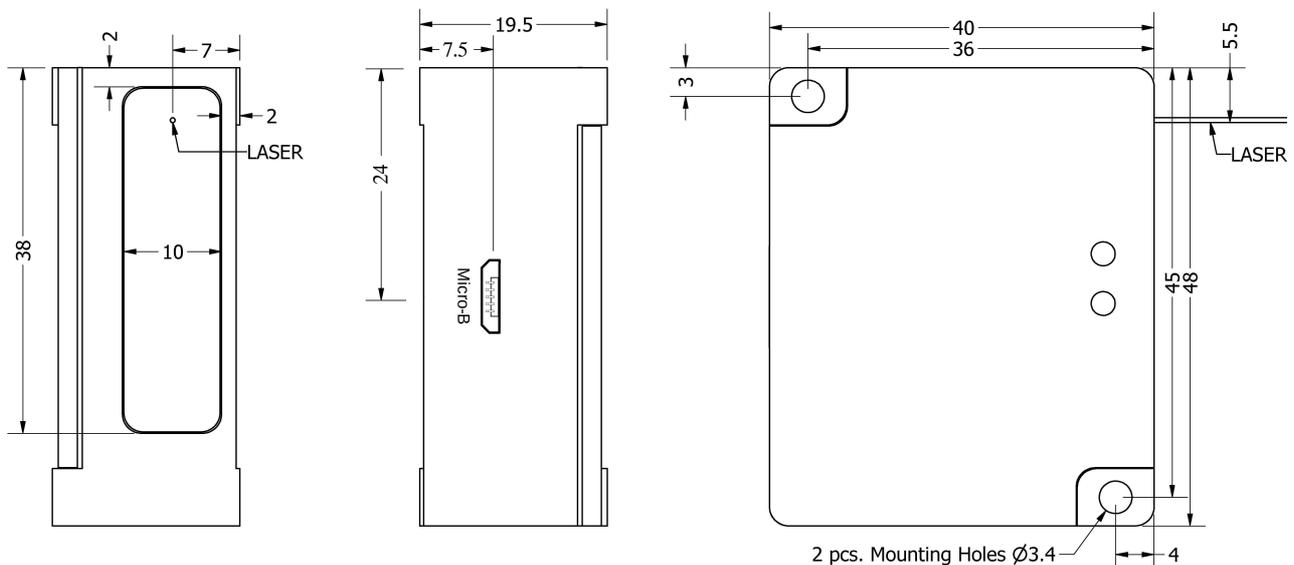
Dimensions WxHxD	48x40x19.5 mm
Weight exc. Cable	55 g
Connector	USB micro-B
Housing	aluminium/glass

Electrical data

Supply voltage	5 V via USB connector
Power consumption, max	0.75 W

Dimensions

Specifications subject to change without notice



USB 150



New SMALL USB 150 sensor with no need for a power supply.

A new innovative and very compact sensor called USB 150 is introduced with a 200 mm measuring range (50-250 mm). The sensor uses a standard USB interface for Windows as well as Unix environments. Cables are fitted with a micro-B connector at the sensor end and a USB-A connector at the other end.

As a novelty the sensor also works in ASCII Mode.



The measuring frequency is 1 kHz and the sensor operates either in BINARY MODE (The normal ODS sensor fashion with 3 byte telegrams, and a nominal resolution of the converted integer number of 0,01 mm, this makes it compatible with all ODS sensors, including Select programming) or in ASCII MODE, where a baud rate of 115200 baud is needed for operating at the full measuring frequency of 1 kHz. A special feature of ASCII MODE is that by sending a capital "Q" a single measuring value is presented. See

backside of the attached Data Sheet for further details about specifications and this protocol.

The format/size of this new sensor is 48 x 40 x 19,5 mm, and a weight of 55 g without cable attached.