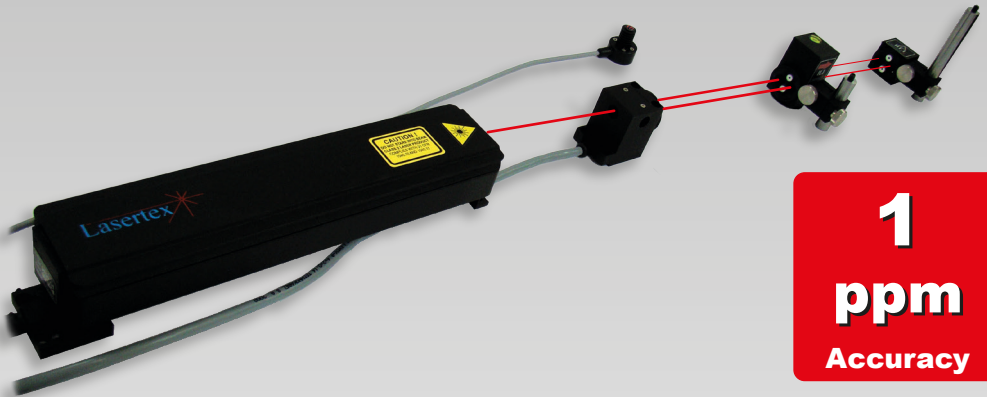


Laser Scale LS-10



1
ppm
Accuracy

Laser Scale LS-10 is a complete laser encoder destined for usage in CMM and CNC machines, instead of traditional glass and magnetic scales. The use of laser encoder allows substantial increase of machines accuracy. The cost of **Laser Scale LS-10** is independent on the measured length. Besides, the device can be easily and cheaply enhanced for simultaneous measurement of two axes. The advanced electronics used in the device implements fully automatic, real time, compensation of the environmental factors influencing the accuracy of the measurement.

Main features:

OEM usage

Laser Scale LS-10 is designed to be used as a replacement of magnetic and glass scales in all the places where quality and cost matters

High resolution and accuracy

At prices comparable to glass scales **Laser Scale LS-10** offers greater accuracies in the range of 1 μ m with resolutions of 40nm (1nm on demand)

Multiaxial operation

Laser Scale LS-10 can perform simultaneous measurements in one or two axes. The cost difference between single and dual axis version is minimal

Encoder compatibility

Laser Scale LS-10 is destined to be used as a part of a CNC machine. As such it offers sin /cos output signals in 1Vpp standard with programmable resolution from 40 nm to 20 μ m

Laser Scale LS-10 Basic Set

Basic set of the LS-10 includes:

- Frequency stabilized laser head LH 01
- Data acquisition box
- Linear interferometer LI 01
- Linear retro-reflector LR 01
- Optical receiver OR 01
- Cables
- Box



1
ppm
Accuracy

Main parameters

Laser type	Two mode HeNe laser with frequency stabilization
Wavelength accuracy	± 0,08 ppm
Short term stability	± 0,002 ppm
Long term stability	± 0,03 ppm
Output power	900 µW
Maximum axis lenght	20 m
Maximum velocity	1 m / s
Resolution	User selectable: 40nm, 1µm, 2µm, 5µm, 10µm, 20µm
Laser MTBF	20 000 hours
Output data format	User selectable: analogue sinA-cosB 1Vpp, digital 5V, USB