## **Micro Optics YS307 Specifications**

Wavelength 633 nm

Beam polarization three linearly polarized modes

Longitudinal mode spacing

Output power (total)

Beam diameter at 1/e2 power points

Beam divergence, full aperture angle

Operating temperature range

Varm-up time

438 MHz

> 5mW

0.8 mm

< 1.1 mrad

10-40 ℃

< 20 min

Dimensions of laser head \$\\$\\$50 mm x L400 mm

Dimensions of control unit W280 mm x H90 mm x D230 mm

Line Voltage A.C.100 - 120 V Power consumption < 100 W

\*We reserve the rights to alter products and their specifications without prior notice.

Besides YS307, we have other types of frequency stabilized He-Ne lasers , QS and QQD.

## Micro Optics QQD

Micro Optics QQD is a transverse Zeeman laser ,which utilizes mode splitting phenomenon caused by transversely applied magnetic field to a laser tube, i.e. Zeeman-effect. Output beam comprises two frequencies with the separation in a few hundreds of kilohertz, whose polarizations are linear and mutually orthogonal. This frequency difference is controlled constant via thermal feed back. QQD is suitable for a light source of a heterodyne interferometer. A general lock-in amplifier is applicable in measurement using this frequency difference as heterodyne beat frequency. Reference signal of measurement is electrically supplied from the controller of QQD, that enables simple system configuration.

## Micro Optics QS

Micro Optics QS is a polarization stabilized laser. The power ratio of adjacent oscillating modes is stabilized to be constant via thermal feed back. High frequency stability (fractional stability of  $10^{-9}$ ) is realized. Output beam of QS contains two frequencies and 1 mW single frequency is selected with a polarizer.

## **About Micro Optics**

Micro Optics Co.,Ltd. is the company specializing in frequency stabilized lasers and optical systems for precise measurements. We have developed and manufactured various frequency stabilized He-Ne lasers for more than 25 years. Our frequency stabilized He-Ne lasers are employed in many factories and laboratories as light sources of various inspection equipments of optical devices, such as high-accuracy 3D profilometers, birefringence evaluation systems and the dilatometer for ultra low thermal expansion materials.

We have also developed interferometric systems with our lasers and frequency control methods for other lasers, such as LD, YAG and ultrashort pulse lasers in collaboration with universities and national laboratories.

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