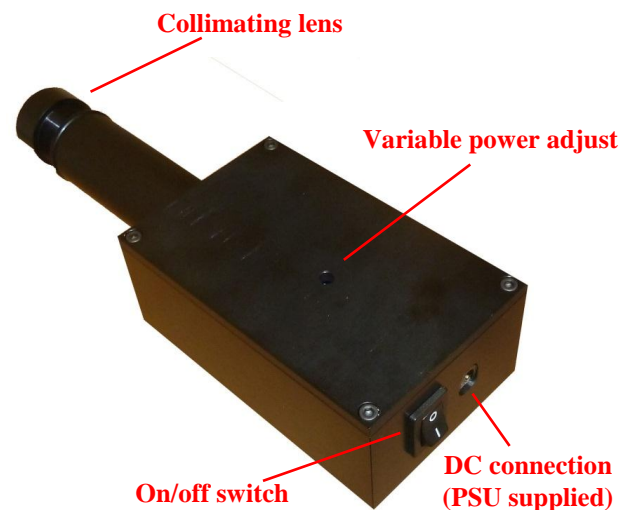


## LM635 Single Mode Fibre Pigtail-Launched Collimated Laser Module



The LM635 laser module is ideal for use in **Computer Generated Hologram**, **Optical Fourier Transform** and **Diffractive Optics** related experiments, in particular where diffracting elements are used, such as the **SDE1024** liquid crystal **Spatial Light Modulator kit** or fixed gratings. It produces a 24mm diameter, high quality collimated visible 635nm laser beam, of <2mW output power.

The module comprises of a **Thorlabs LPS-635-FC** pigtail single mode fibre system and **EK1101** drive board, with a high quality achromatic doublet lens to collimate the beam. The laser system is fully enclosed and pre-configured, removing any risk of physical or electrostatic damage to the fibre, laser diode and drive board either from contact by the user or from having to place the sensitive components on the bench top. The optical power output may be varied through the adjustment of a potentiometer. An M6 mounting hole on the base is provided to allow easy installation onto an optical bench/breadboard.



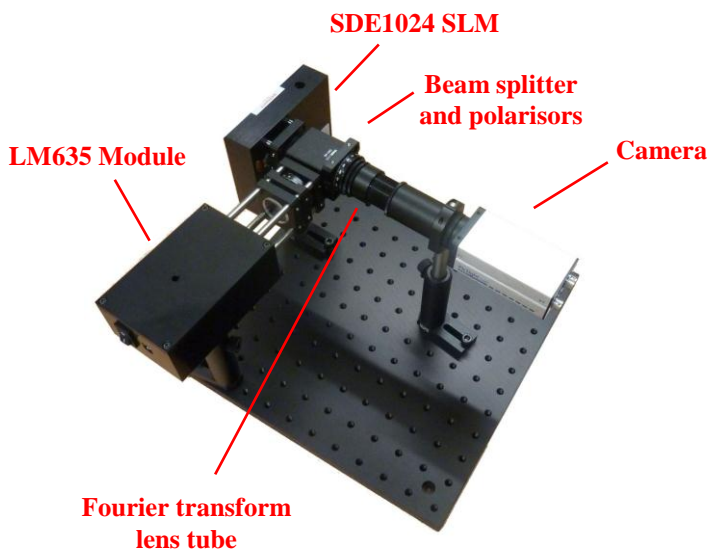
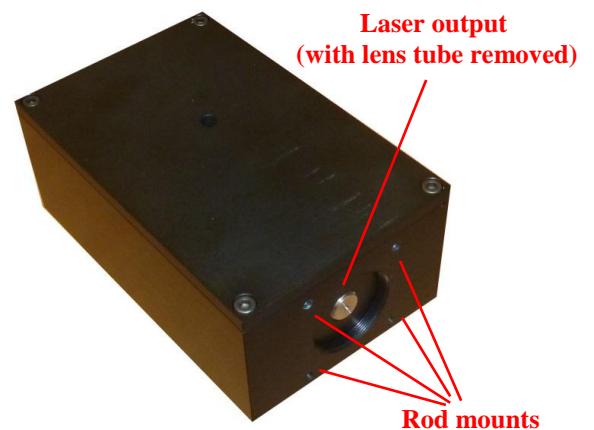
*Holographic replays produced using the LM635 with the SDE1024 SLM kit (centre), also available.*

## Main Features and Specifications

- High quality visible 635nm red laser beam
- <2mW variable optical power output
- Plug and Play setup
- 24mm beam diameter
- Fully enclosed single mode fibre and laser driver
- Compatible with Thorlabs 30mm cage system
- M6 mounting hole

The output tube and lens may be removed (shown) if a lower focal length lens / smaller beam diameter is required. The enclosure is also compatible with the Thorlabs 30mm cage system, allowing optical rails to be attached for integrating the module into larger optical systems.

The example shown below is of an Optical Fourier Transform stage mounted on an optical breadboard (not supplied).



Smaller focal length lenses, up to 100mm are available if smaller beam diameters are required and other wavelength lasers are available on request. We can also supply the optical rail/post components and breadboards if required – please contact us with your specific requirements.