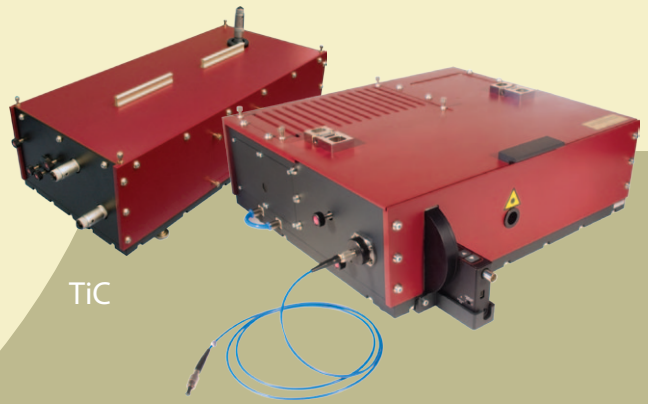
Continuous-Wave Solid-State Lasers CW

Continuous-Wave Ti:S Laser TiC

- 700-1000 nm broad wavelength tuning range (with a single set of optics)
- >1.5 W @ 800 nm average output power
- Integrated pump laser option (from 2 W to 10 W)
- Etalon option for narrower generation linewidth (<2 GHz)
- PC connection for automated wavelength tuning.
- Fiber-coupled output option



TiC-FF (fiber-coupled and integrated pump version)

Product overview

Continuous-wave Ti:Sapphire laser features broad wavelength tuning range (700-1000 nm) and finds itself as a useful tool for many fields of fundamental research, especially various spectroscopy applications.

The wavelength tuning is carried out by a birefringent Lyot filter and can be either manually controlled or motorized via a step motor with USB connection to a PC. Two etalons can be optionally placed into the resonator in order to narrow the linewidth of the generated radiation down to 2 GHz.

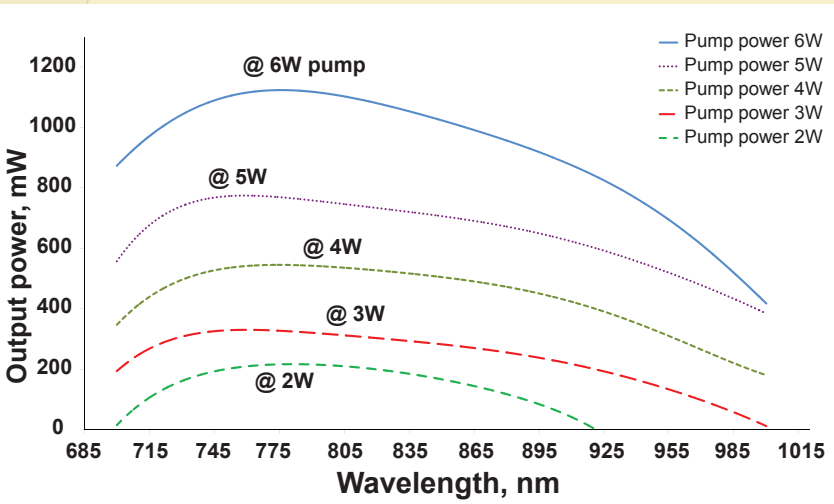
The CW Ti:Sapphire laser needs to be pumped by a CW DPSS or Ar-Ion pump laser at 532 nm. Our company offers the oscillators without the pump laser, as well as a version with integrated pump laser with pump power varying from 2 W to 10 W.

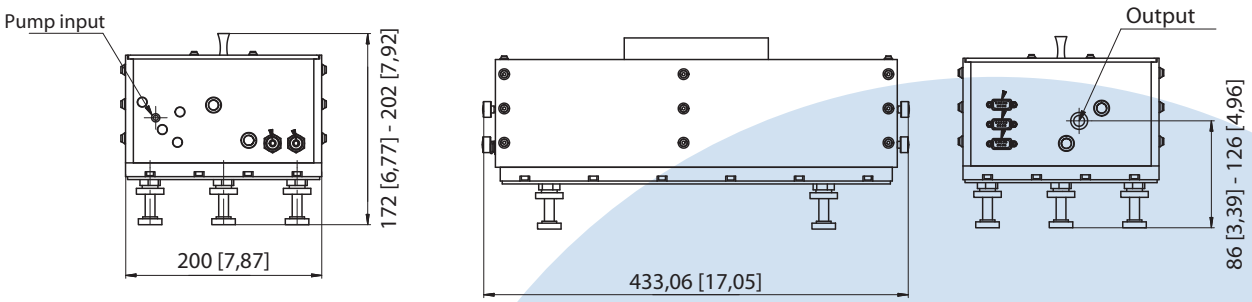
Optional fiber-coupled modification is available. The radiation is steered into a fiber with 4 um core diameter. The optical scheme allows easy switching between the free-space and the fiber outputs via a flip mount.

TiC technical specifications

Wavelength tuning, nm	700-1000*
Average output power, mW	700*
Average output power at optional fiber output, mW	400*
Fiber type (optional)	single-mode, FC-FC, 1 m, 4 um core
Linewidth, GHz	< 45 < 2 (with 2 etalons) < 20 (with 1 etalon)
Spatial mode	TEMoo
Divergence, mrad	< 2
Polarization	horizontal (at free-space output)

** - depends on pump laser power, the values are given for 5 W pump power.*





TiC - mm [inches]

Avesta Ltd., Laboratory Building, P. N. Lebedev Physical Institute,
Troitsk, 142190, Moscow, Russia

Tel: +7 495 967-94-73; +7 495 851-00-78
Fax: +7 495 646-04-95

e-mail: fs@avesta.ru
www.avesta.ru