

TRLi Series

Compact high energy and high repetition rate Q-switched pulsed Nd:YAG lasers

Applications include

OPO Pumping
Ti:S Pumping
Dye Laser Pumping
Deflashing
Cleaning
Spectroscopy
Photoacoustic Imaging
LIBS
LIDAR
Flash Photolysis
Ablation
PLD

TRLi series features

- Plug and play interchangeable harmonic modules to 213nm
- Twin-rod architecture for high beam homogeneity
- Intelligent motorised auto-tuning of harmonics
- Auto-stabilisation for 'set and forget' operation
- Integrated motorised attenuator
- Easy connections and fast start up
- High energy and high repetition rate models
- Super Gaussian, stable and stable-telescopic resonator options
- LUCi touchscreen or PC control interface
- Rugged industrial design



TRLi Series

The advanced technology behind the TRLi performance makes it first in its class for most applications.

Plug and play bolt-on harmonic modules

All the harmonic wavelengths of Nd:YAG (532nm, 355nm, 266nm and 213nm) are available via dedicated separate easy change modules for each wavelength.

Automatic harmonic tuning and auto-stabilisation

All harmonic modules are available with automatic harmonic tuning linked to the LUCi controller. All wavelengths are also available with optional auto-stabilisation. This feature maintains the set energy over long periods of continuous operation and includes a PSU control function to compensate for the lamp aging process.

Integrated motorised beam attenuator

A high resolution motorised variable attenuator is available. This provides continuous energy adjustment of the laser output without altering the beam spatial profile or focusing parameters.

Twin-rod architecture for high beam homogeneity

A twin-rod birefringence compensating oscillator design is standard on all TRLi series. This feature ensures the highest beam homogeneity possible. The benefits are seen in low M^2 (higher focusability), better beam profiles and more efficient harmonic conversion.

Intellihead laser function control

The Intelligent laser head uses a dedicated microprocessor card to provide precision control over a host of functions including harmonic temperature stabilisation, automatic harmonic tuning, energy monitoring and attenuator controls. The system continuously monitors the Intellihead card and the PSU microcontroller, providing feedback to the user via the LUCi controller.



IP54 Sealed output window.



Motorised variable attenuator.

Intelligent bolt-on harmonic unit.

TRLi Series

The advanced technology behind the TRLi series is designed for flexibility and enhanced user experience.



Fast set up and total control

The laser head and LUCi controller connect directly to the PSU and the whole laser can be assembled and running in less than 15 minutes.

LUCi touchscreen system control interface

Full access to the control parameters and sensor feedback from the laser head and power supply are all via the intuitive LUCi touch screen user interface.



Flexible and upgradable

The standardised mechanical mounting system for the harmonics modules ensures add-on modules will always be available for your TRLi laser. The laser system firmware and LUCi software can also be easily upgraded via USB.

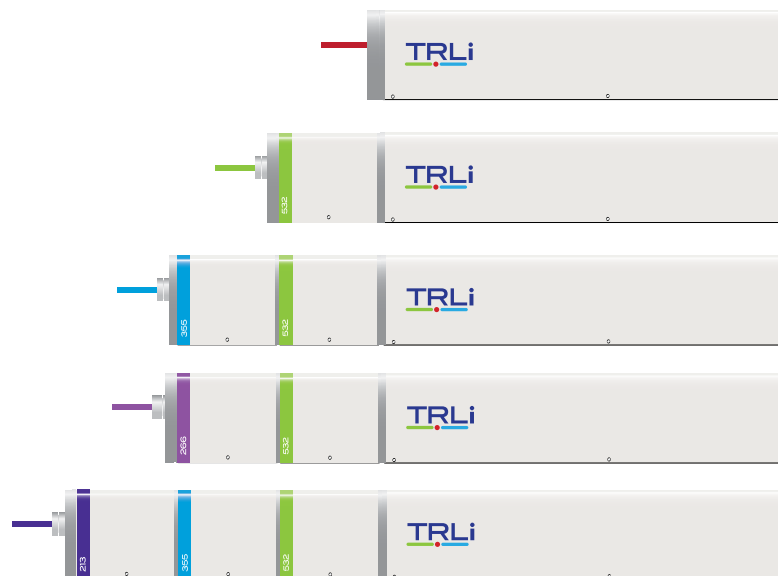
Large model range

The TRLi series encompasses both high energy (850mJ) and high repetition rate (200Hz) models. With the addition of Super Gaussian, Telescopic and Stable-telescopic resonator choices, choosing a TRLi for your precise application could not be easier.

User experience

All TRLi lasers are sealed to IP54 against the ingress of moisture and dirt and extremely field rugged. Most systems are fully air cooled and require no external services except a mains electrical input.

A comprehensive 2 year warranty, long flashlamp lifetimes and the Litron guarantee of quality build make the TRLi series one of the easiest lasers to own and maintain.



TRLi Series

Large flexible model options

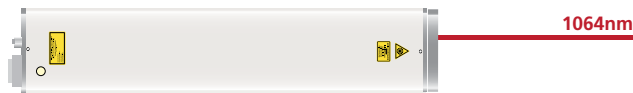
All model options are available with harmonic auto-tuning, auto-stabilisation and variable motorised attenuators.

Other model options include:

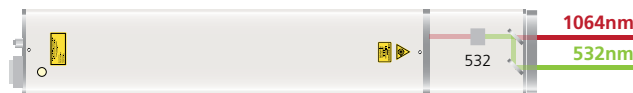
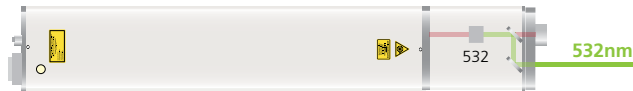
Built-in harmonic diode pointer.

Fully motorised hands free auto wavelength switching option with 532, 355, and 266nm available as a single unit.

Options for 1064nm output



Options for 532nm output



Options for 355nm output



Options for 266nm output



Option for 213nm output



Our policy is to improve the design and specification of our products. The details given in this document are not to be regarded as binding.

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