

# MagiQ Research Labs (MRL) Tunable Pulsed Laser

## Applications

- Quantum Key Distribution
- Fiber optics characterization
- Metrology
- Sensing
- Interferometry
- General laboratory measurements

## Key Features

- Tunable wavelength over C-Band (or L-Band)
- Variable Pulse width
- Internal clock and external triggers with burst mode
- LabVIEW® control

## Services Available

- Technical Support
- Custom Products
- Design Engineering
- Contract Research and Development

## Web Site:

[www.magiqtech.com](http://www.magiqtech.com)

The TPLS-2300 series Tunable Pulsed Laser is designed with the researcher in mind, combining the maximum level of flexibility with an easy to use LabVIEW® interface. It is wavelength tunable across the C- or L- band and capable of producing flat-top variable width (100 ps – 1 μs) optical pulses at repetition rates up to 1 GHz.

The TPLS-2300 has several operating modes and the ability to synchronize multiple units. It can be externally triggered by a user supplied clock source at any frequency up to 1 GHz with low jitter. The TPLS-2300 can also be internally clocked, producing pulse trains at rates between 1 Hz and 100 MHz. This operation can be either free-running or N-pulse burst mode using an external- or software- trigger.

### Specifications:

- Wavelength Tuning Range: 1528 - 1563 nm (in 0.4 nm increments), (1568 - 1607 nm option)
- Output Power: 6 mW
- Linewidth: <5 MHz
- PM fiber coupled output
- Tunable Pulse Width: 100 ps to 1 μs & CW
- Operating Modes:
  - Internal Trigger: 1 Hz to 100 MHz
  - External Trigger: DC to 1 GHz,
  - One Shot, Burst Mode, Software Trigger
- Sync out
- Interface: LabVIEW® (USB connection to PC)

Ordering Information: If you're interested in learning more about MagiQ's solutions, please contact [sales@magiqtech.com](mailto:sales@magiqtech.com) or Andrew Hammond-Vice President, Business Development, 617-661-8300 x201 or [andy@magiqtech.com](mailto:andy@magiqtech.com).

The TPLS can be ordered on a custom basis. Please call or email to set up an appointment with an optics engineer.

Specify: C-Band or L-Band Option

### About MagiQ Research Labs (MRL)

MagiQ Research Labs provides custom products, design engineering, and contract research and development services for optics, quantum information, fiber sensing, aerospace and defense applications. MRL also contracts directly with private firms and government agencies such as the Army, DARPA, and NASA.

MagiQ Technologies, Inc. reserves the right to make changes to the product(s) and information contained herein without notice.

No liability is assumed by MagiQ Technologies as a result of the use or application of this product.

Copyright 2008 MagiQ Technologies, Inc. All rights reserved.

MagiQ, MagiQ Research Labs, and MRL are trademarks of MagiQ Technologies, Inc.



11 Ward Street  
Suite 300  
Somerville, MA  
02143-4214