

**LIGHT. PRECISION. ANALYTICS**

Wavelength: **336 nm / 355 nm**

Pulse Energy: **Up to 250  $\mu$ J**

Switch: **Active Q-Switch**

Repetition Rate: **1 kHz down to single pulse**



**MALDI-Imaging**

Imaging method for analysing chemical compounds and their spatial distribution.



**TR-FRET / TRF**

Molecular interaction studies in cell biology and drug discovery.



**MALDI-TOF MS**

Efficient ionization for mass spectrometry in proteomics and biochemical research.



**Laser-Induced Fluorescence (LIF)**

Sensitive detection of organic and biochemical compounds.

**qMNL 1000 - DPSS Laser**

Next generation compact **ACTIVELY Q-SWITCHED** laser

Precision on a new level:

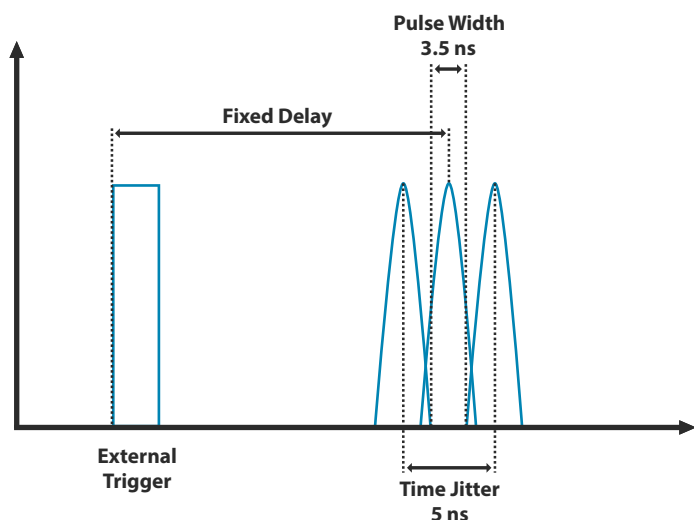
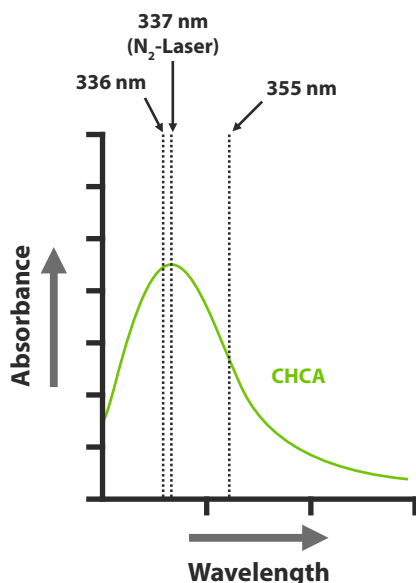
Experience the future of laser technology with the LTB qMNL 1000, our newest series of long-life lasers, designed for unparalleled performance in MALDI-TOF MS and fluorescence applications. Moving beyond our renowned nitrogen lasers, the qMNL series represents a significant leap forward. These devices are actively Q-switched DPSS lasers, offering superior control of laser parameters, such as power and precision, critical for demanding applications.

Versatile and efficient:

With standard wavelengths of 336nm or 355nm, combined with an active Q-switch, the qMNL is an ideal ignition source for a wide range of time-critical applications. The 336nm wavelength is specifically chosen to operate within the optimum absorption range of common MALDI-TOF MS matrices, for instance CHCA & DHB, ensuring very efficient and reliable results.

Quick and easy integration:

The qMNL 1000 boasts a compact size and an integrated laser controller, making it incredibly easy to integrate into your OEM applications. Plus, by utilising the same robust housing as our popular MNL models, developing new device generations requires minimal adaptation effort, streamlining your product development process.



## Specifications

			qMNL 1000 - 355	qMNL 1000 - 336
Optical	Wavelength	nm	355	335.5
	Pulse energy	μJ	> 250	> 100
	Pulse width	ns		3.5
	Repetition rate	Hz		≤ 1000
	Pulse to pulse stability	%		< 3
	Beam diameter	mm		≥ 2 (or fibre coupled)
	Laser class			4
Electrical	Power consumption - mean	W	55 (@1000Hz 35°C)	
	Power consumption - min	W	15 (@1000Hz 35°C)	
	Power consumption - max	W	120 (@1000Hz 35°C)	
	Operating Voltage	V	24	
General	Weight	kg	4	
	Dimensions (L x W x H)	mm	289 x 95 x 95	
	Control interface (integrated in housing)		USB, Ethernet	

Subject to technical changes.

