

Myron PIV

Dual Q-Switched Diode-pumped Nd:YAG Lasers

FEATURES

- Flexible configuration for combined and independent laser operations
- No DI water requirement
- Field-proven long-life diode module
- Rugged design, high reliability
- Up to 20 KHz operating repetition rate
- Average output up to 60 W
- Multi-mode and TEM00 mode output
- Smooth beam profile at focus
- Ideal for Particle Image Velocimetry and Industrial applications

APPLICATIONS

- PIV
- Ultrafast pumping
- Material processing
- Micromachining



The Myron PIV combines two independent diode-pumped, Q-switched second harmonic Nd:YAG lasers into one laser beam. It features a field-proven long-life diode module and no DI water requirement for water chiller. The rugged enclosure design, optimized cavity design and PRF adjustment result in excellent output stability over a large dynamic range as well as increased reliability for long-term operation. The Myron PIV is available in both TEM00 and Multi-mode output. The two laser head design makes the PIV system flexible in combined and separated laser applications to provide one high-powered or two synchronized half-powered laser outputs. In either case, the two laser beams can be synchronized with the adjustable beam delay.

Two Myron lasers are identical in optical design giving temporally and spatially matched laser pulses for the highest cross-correlation performance. Each laser can be independently triggered via TTL pulses. The external beam combination allows easier access to optical components and more flexible laser applications.

The Myron PIV provides an optimum solutions for scientific as well as industrial customers for applications, such as PIV, ultrafast amplifier pumping, material processing, micromachining, etc.

	Myron PIV-60-M Green	Myron PIV-40-0 Green	Myron PIV-60-M IR	Myron PIV-40-0 IR
Average Power	>58 W @ 10KHz	> 38W @ 10 KHz	>60 W @ 10KHz	> 40W @ 10 KHz
Repetition Rate	4- 20 KHz	4-20 KHz	4-20 KHz	4-20 KHz
Wavelength	532 nm	532 nm	1064 nm	1064 nm
Pulse width	<120 ns	<90 ns	<120 ns	<90 ns
Spatial Mode	$M^2 < 10$	$M^2 < 1.2$ (TEM ₀₀)	$M^2 < 10$	$M^2 < 1.2$ (TEM ₀₀)
Beam Size (1/e ²)	~ 1 mm	~ 1 mm	~ 1 mm	~ 1 mm
Energy Stability	<2 % RMS	<2 % RMS	<2 % RMS	<2 % RMS
Polarization	Cross	Cross	Cross	Cross

