

# TLS Selection Guide



TLS-EQ-9



TLS-EQ-77



TLS-EQ-77-UV



TLS-EQ-77-NIR

## Properties

Description	Tunable light source with EQ-9 LDLS, optimized for visible and NIR wavelengths	Tunable light source with EQ-77 LDLS, optimized for visible and NIR wavelengths	Tunable light source with EQ-77 LDLS, optimized for UV wavelengths	Tunable light source with EQ-77 LDLS, optimized for NIR wavelengths
Wavelength Range	380 nm - 1100 nm	350 nm - 1100 nm	200 nm - 770 nm	800 nm - 1700 nm
Scan Speed	<20 ms per 2 nm step	<20 ms per 2 nm step	<20 ms per 2 nm step	<20 ms per 2 nm step
Numeric Value (1.5 mm Output fiber)	0.39 NA	0.39 NA	0.39 NA	0.39 NA
Bulb Lifetime	10,000 hours	10,000 hours	10,000 hours	10,000 hours
Spectral Resolution (bandwidth, FWHM)	6.0 nm	6.5 nm	4.7 nm	9 nm
Laser Class	Class 1 (IEC 60825-1: 2014)	Class 1 (IEC 60825-1: 2014)	Class 1 (IEC 60825-1: 2014)	Class 1 (IEC 60825-1: 2014)

## Typical Performance

Maximum In-Band Flux	3.5 mW at 882 nm*	4.9 mW at 440 nm*	1.6 mW at 300 nm**	1.6 mW at 920 nm*
Average In-Band Flux	1.1 mW	2.3 mW	1.1 mW (200 nm - 500 nm)	0.44 mW

\*1500  $\mu$ m core diameter fiber optic cable    \*\*600  $\mu$ m core diameter fiber optic cable

## Physical Specifications

System Dimensions	245 x 357 x 285 mm	279 x 456 x 243 mm	279 x 456 x 243 mm	279 x 456 x 243 mm
System Weight	7.6 kg	16.6 kg	16.6 kg	16.6 kg
Controller Dimensions	–	157 x 300 x 133 mm	157 x 300 x 133 mm	157 x 300 x 133 mm
Controller Weight	–	2.9 kg	2.9 kg	2.9 kg

## Facility Requirements

Cooling	No auxiliary cooling required	Water cooling	Water cooling	Water cooling
Nitrogen Purge	Recommended. Grade 4.8 or higher, filtered to 5 $\mu$ m; 20 psig $\pm$ 2	Recommended. Grade 4.8 or higher, filtered to 5 $\mu$ m; 20 psig $\pm$ 2	Recommended. Grade 4.8 or higher, filtered to 5 $\mu$ m; 20 psig $\pm$ 2	Recommended. Grade 4.8 or higher, filtered to 5 $\mu$ m; 20 psig $\pm$ 2
Electricity	100-240 VAC, single phase 50-60 Hz 140 W max. (LDLS) 50 W max. (monochromator)	100-240 VAC, single phase 50-60 Hz 350 W max. (LDLS) 50 W max. (monochromator)	100-240 VAC, single phase 50-60 Hz 350 W max. (LDLS) 50 W max. (monochromator)	100-240 VAC, single phase 50-60 Hz 350 W max. (LDLS) 50 W max. (monochromator)
Ambient Temperature	15-35°C	15-35°C	15-35°C	15-35°C

**Note:** Product information included in this Selection Guide represent typical values and are provided for reference only.

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Specifications are typical and subject to change without notice.  
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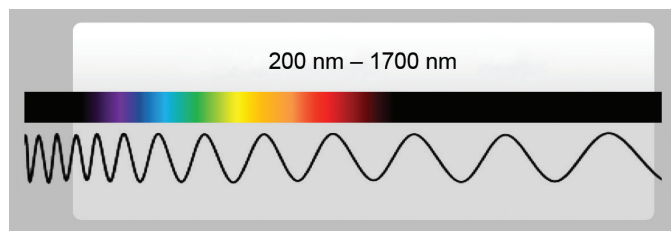
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# Laser-Driven Tunable Light Source

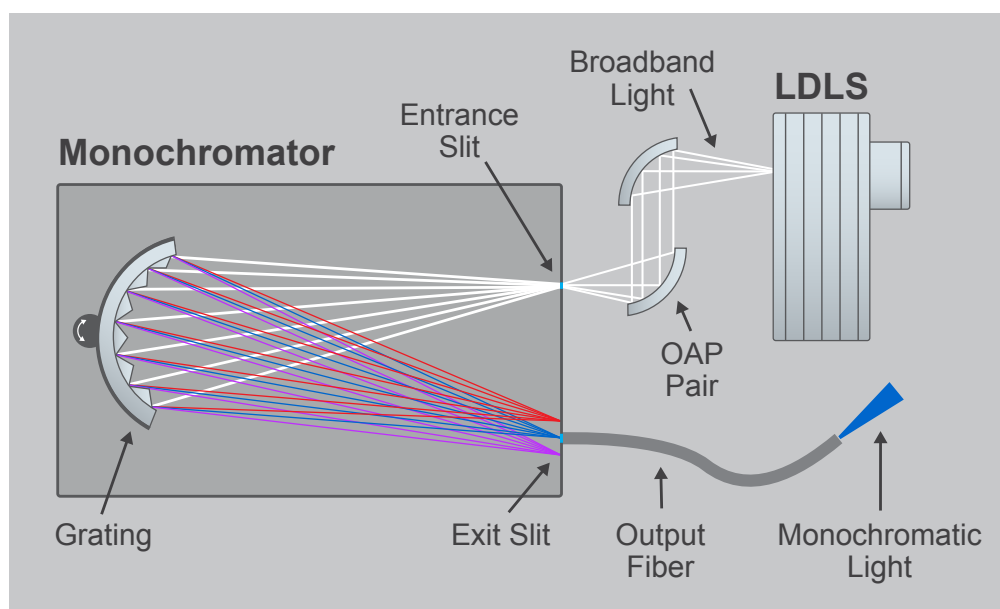
## Product Selection Guide

Energetiq's Laser-Driven Tunable Light Sources are built around Energetiq's Laser-Driven Light Source (LDLS™) platform. This exciting technology provides a wide wavelength range of tunability, high spectral resolution, fast wavelength scanning and an extremely long lifetime with the added benefit of a convenient fiber-coupled output.

### Wavelength Range



### Principle of Operation



### In-Band Light Flux Comparison *Average in-band light flux with standard output fibers. For reference only.*

