QD-TLS High Power Tuneable Light Source

(280-1100 nm)

The **QD-TLS** is a high power tuneable light source that delivers superlative stability, high wavelength agility and the power of continuous tuning.

Designed around a single 19" benchtop enclosure, this compact solution easily fits into a wide range of materials and photodetector characterization applications in research, industry and OEM.

Key benefits:

- Ultra-quiet short-arc xenon light source with starter and constant current power supply
- Integrated solution, housed in 19" benchtop enclosure
- 120 mm focal length monochromator for excellent spectral selection and continuous tuning
- Wavelength control through front panel or over USB 2.0 using SCPI commands.

❶ QD-TLS

Power supply, lamp and monochromator integrated into single 19" benchtop enclosure

❷ Wavelength Control

With direct front panel control, put the power of monochromatic light at your fingertips

❸ Display

An OLED display reports wavelength, bandwidth, burn time and stability
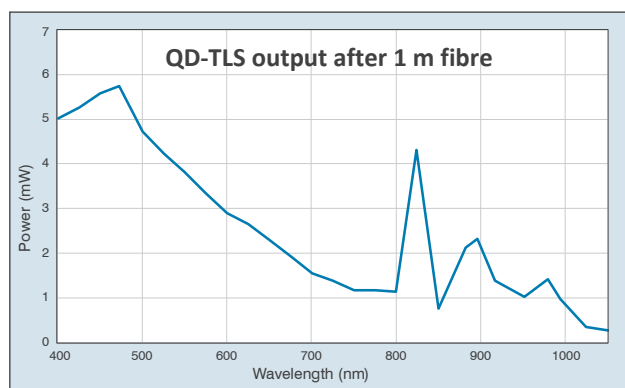
❹ Output Port

Light output port adapter for 1 mm fiber, including iris

❺ Monitor Port

Provided to monitor transmitted optical power to facilitate replacement lamp alignment

❻ USB

Take full control of the QD-TLS over USB 2.0 using SCPI commands.

Specifications	
Light source	
Lamp type	Short-arc OFR xenon lamp (100 W, 14 V)
Operating current	Constant current
Coupling	Ellipsoidal reflector, 60 mm diameter
Nominal lamp life time	500 hours
Monochromator focal length	120 mm effective
Grating mount	Single grating on-axis turret
Grating type	Concave blazed holographic
Grating line density	1200
Nominal blaze wavelength	380 nm
Slit type	Fixed slit
Drive type	Stepper motor
Optical performance	
Wavelength range	280 nm -1100 nm
Bandwidth at FWHM	20 nm
Control	
Interface	USB2.0
Software control	SPCI commands
Electrical/Mechanical	
Overall dimensions	300 mm (Length) x 460 mm (width) x 185 mm (height)
Weight	8.8 kg
Power supply	100-240 V AC 50-60 Hz
Orientation	**Horizontal only**
Environmental	
Operating temperature range	10-35 °C / 50 – 95 °F
Operating humidity range	30-70% (no condensation, less than 70% above 30 °C)

QD-TLS output after 1 m fibre

Ordering Information	
Ordering Number	**Description**
QD-TLS	High power light source Spectral Range: 280 - 1100 nm
QD-TLS-100Xe	100 W short-arc xenon lamp, nominal 500 hours lifetime

For more information, please visit our website:

www.qd-uki.co.uk

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