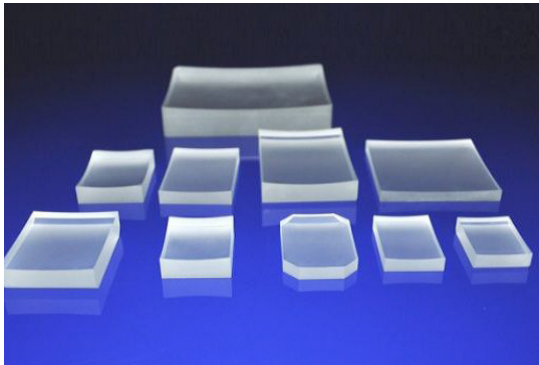


Newly Launched Products in Q4 2015

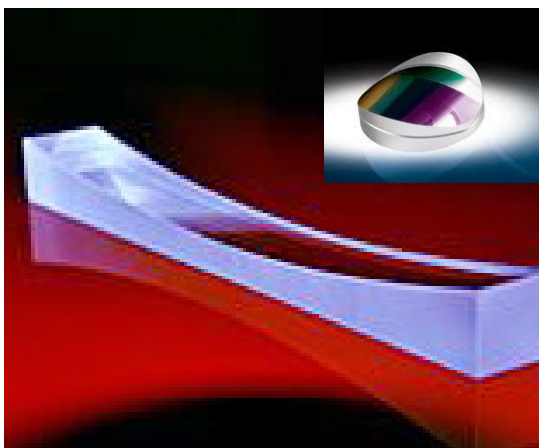
Toric Lens & Cylinder Lens



A toric lens is a lens with different optical power and focal length in two orientations perpendicular to each other. A toric lens can replace a combination of plane lens, spherical lens and column lens, so as to reduce size of instruments. [Click for Enquiry](#)

Product Features:

- Radius: $\pm R76\text{mm}$ --- $\pm R1800\text{mm}$
- Size: min 30mm \times 20mm, max 130mm \times 100mm
- Diameter: min 10mm \times 8mm, max 195mm \times 195mm
- Surface Quality: 10/20



The cylindrical lens belongs to aspherical lens, which is able to reduce the ball difference and color difference effectively. It can be divided into flat convex cylindrical lens, plane concave cylindrical lens, double convex cylindrical lens and double concave cylindrical lens. A cylinder lens can be used for single-dimensional amplification. [Click for Enquiry](#)

Product Features :

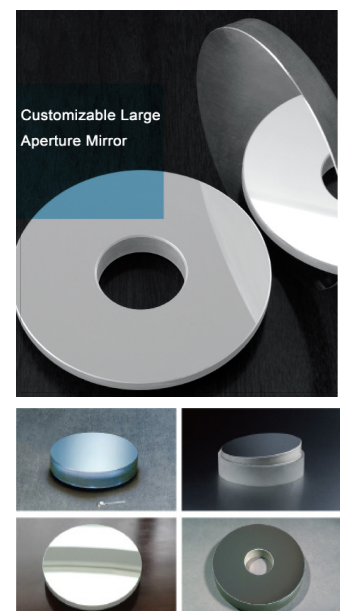
- Diameter: 3.5mm---450mm
- Diameter Tolerance: $\pm 0.02\text{mm}$
- Thickness Tolerance: $\pm 0.02\text{mm}$
- Surface Quality: 20/10
- Clear Aperture: >90%

Customizable Large Aperture Mirror

[Click for Enquiry](#)

| Product | Diameter | Surface Precision | Surface Quality | Roughness |
|--------------|-------------|--------------------|-----------------|-----------|
| Plane Mirror | 10 –100mm | 1/50 λ P-V | 20/10 | 0.4nm |
| | 100 –600mm | 1/10 λ P-V | 60/40 | 0.4nm |
| | 510 –2000mm | 1/50 λ RMS | 60/40 | 0.4nm |

| Product | Diameter | Surface Precision | Surface Quality | Roughness |
|------------------------------------|-------------|---------------------|-----------------|-----------|
| Aspherical/ Spherical Mirror | 10 –200mm | 1/100 λ RMS | 60/40 | 0.4nm |
| | 200 –500mm | 1/100 λ RMS | 60/40 | 0.4nm |
| | 500 –2000mm | 1/50 λ RMS | 60/40 | 0.4nm |



Astronomical Telescope



“Wavelength 80 APO” is a newly launched high precision multi-purpose astronomical telescope. All objective lenses are apochromatic lenses composed of special optical glasses such as S-FPL53. Therefore high sharpness without colour difference is guaranteed even with 300X amplification. The telescope is capable to do full-frame photography in the band of 400-900 nm, and applications include astronomical observations and photography, scenery photography, etc. Wavelength has very strict quality control, so as to make sure that every telescope is perfect for astronomy enthusiasts and those who buy as a gift.

[Click for Enquiry](#)

High Power Scan Lens & 9.4µm CO2 Laser Optics

Scan lens has been Wavelength’s traditional advantage for years. Hundreds of existing designs and fast custom design, fulfill all your expectations in Scan Lens with time and cost saving.

Scan Lens for Ultrafast 1030-1090nm - by Fused Silica

Wavelength produce high power lens for short pulse laser at IR or UV waveband. These are made of quartz (fused silica) and coated at extreme clean environment using carefully selected material.

[Click for More Models](#)



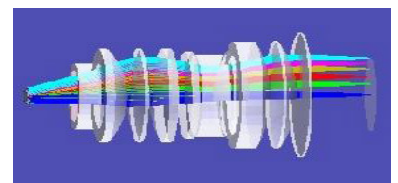
| Model No. | EFL (mm) | Scanning Angle (±°) | Scan Length (mm) | Scan Field (mm) | Entrance Pupil (mm) | Length (mm) | WD (mm) | Screw Thread (mm) | Window Size (mm) |
|-------------------|----------|---------------------|------------------|-----------------|---------------------|-------------|---------|-------------------|------------------|
| SL-HF-50-100Q | 100 | 21.3 | 71.0 | 50x50 | 15.0 | 130.5 | 131.0 | M85x1 | 128x3 |
| SL-HF-112-163 | 163.0 | 25.0 | 158.4 | 112x112 | 10.0 | 79.5 | 203.7 | M79x1 | 76x3 |
| SL-HF-175-254 | 254.0 | 25.0 | 247.0 | 175x175 | 10.0 | 58.68 | 304.18 | M85x1 | 85x2.5 |
| SL-HF-280-500-D30 | 500.0 | 22.9 | 396.0 | 280x280 | 30.2 | 128.0 | 618.3 | M120x1 | 180x3.5 |

9.4µm CO2 Laser Optics

Wavelength Opto-Electronic brings innovation at ultra-competitive prices and quick delivery to CO2 laser lenses and mirrors. We offer a full range of CO2 Laser Optics for High power CO2 lasers. Some Telecentric scan lenses are listed as below.

[Click for More High Power CO2 Laser Optics](#)

[Click for More F-Theta Scan Lens](#)



| Model No. | EFL (mm) | Scanning Angle (±°) | Scan Length (mm) | Scan Field (mm) | Entrance Pupil (mm) | Length (mm) | WD (mm) | Wave-length (µm) | Window Size (mm) |
|-------------------|----------|---------------------|------------------|-----------------|---------------------|-------------|---------|------------------|------------------|
| TSL-9.4-50-75 | 75.0 | 28.0 | 71.0 | 50x50 | 20.0 | 71.5 | 73.4 | 9.4 | 108x3 |
| TSL-9.4-70-120SPH | 120.0 | 25.0 | 99.0 | 70x70 | 20.0 | 82.0 | 151.2 | 9.4 | 130x3 |
| TSL-9.6-70-140ZA | 140.0 | 20.0 | 99.0 | 70x70 | 15.0 | 142.0 | 124.0 | 9.6 | 115x3 |
| TSL-10.6-50-100G | 100.0 | 20.0 | 71.0 | 50x50 | 25.0 | 93.0 | 106.0 | 10.6 | no window |

Laser Power Meter



We offer laser measurement devices such as laser power probe, power meter for various applications.

Our product line includes:

- Power and Laser Energy Meters
- Laser Power Probes
- OEM Sensors
- Industrial processes monitor systems

Our product lines of power and laser energy meters are based on the following technologies/methodologies:

- Careful design of the heat detectors provide the best performance and reliability
- The research on materials of the coatings absorbing the laser radiation has produced coatings with damage thresholds $> 12\text{KW}/\text{cm}^2$
- Measuring heads that provide diameter and position of beam
- Measuring a broad spectrum IPL (Intense Pulsed Light)
- Touch-screen readers, linked Ethernet, Multi Language
- Power control and industrial processes, generation of alarms via opto-isolated outputs
- Compact USB and measurement Software

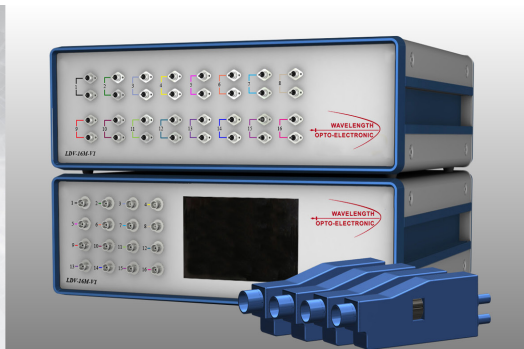
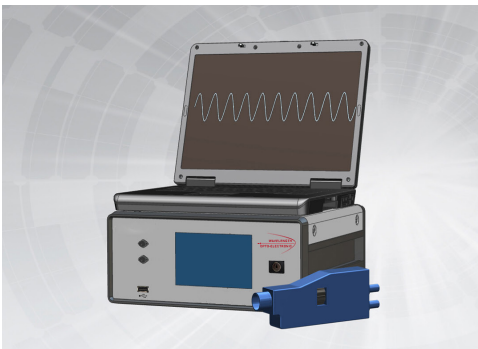
Laser Doppler Vibrometer

Currently we offer a series of fiber-type single-point, multi-point and remote laser vibrometer systems in which FPGA processors are used for digital demodulation.

Based on our core optics technology, Wavelength develops Laser Doppler Vibrometer systems for the following applications: aeronautics and space Industry, automotive, hard-disk, drive diagnostics, micro- and nano-structure analysis, civil structure analysis, medical, health care and QC in manufacturing.

Currently we have Laser Doppler Vibrometer for

- 1) Long range
- 2) Simultaneous multi-point vibration measurement



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